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You are about to begin one of the greatest personal adventures of your entire life. You are going to create a new, more vigorous image, a stronger healthier more muscular body You 'll have better posture, move with more vitality and flexibility You'll think faster clearer and more creatively and express your ideas more forcefully Because you're fit and strong, you 'll overcome obstacles that once would have been insurmountable. Your life will be richer than you ever thought possible. I have helped millions of students to accomplish their goals. I am sure you will follow in their footsteps. All you have to do is put this course to work for you, sticking to your training and keeping your hopes high. That is my hope and desire for you.

Your trainer Joe Weider — The Muscle Builder Trainer of Champions since 1936



INTRODUCTION LETTER FROM JOE WEIDER

Dear Student:

You are embarking upon the best system of muscle-building instruction ever devised. Using the Weider System, beginners achieve their physical goals much faster than with any other system. More than 45 years of scientific and practical testing, nearly a half-century of explosive accomplishment, with literally millions of successful students around the world—that's proof that the Weider System works for both men and women. It gives men strong, muscular, virile physiques! Using the Weider System, women can firm, tone and reshape their bodies, gaining energy and strength in the process!

With my courses, you will be sculpting and strengthening your body, until it looks the way you want it to look. You can also dramatically improve your sports performance. Who knows? You may even become one of the world's best developed and strongest men or women, like many of my students in the past.

There is no guesswork in this course, only scientifically tested methods that put muscle on your body wherever you need it. The information is all here. Now you can put it to work for your own body! The Weider System takes you in gradual, safe and scientific steps from the beginning right up through the most advanced stages of bodybuilding workouts.

The speed with which you reach your goals depends on how much you are willing to put into your workouts. I won't kid you, it's hard work, exceedingly hard work. But in the end I assure you that your sweat and toil will be well spent.

I'll always be by your side. I want you to subscribe to my monthly magazines, MUSCLE & FITNESS, SHAPE, FLEX and MEN'S FITNESS. These four magazines are an ongoing supplement to this course. They contain the latest training information issued by the Weider Research Group after it has been field-tested by my bodybuilding champions. The Weider Research Group has also issued a number of detailed specialization bulletins which give much more detailed information on some aspects of training than can be found in this course. I want you to become another Weider champion like Arnold Schwarzenegger Lou Ferrigno, Rachel McLish, Franco Columbu, Larry Scott, Frank Zane, Lee Haney, Corinna Everson and all the other superstars I have advised and trained over the years. Let's work as a team, just you and I, to make your bodybuilding dreams come true!

Good luck,

Joe Weider

Joe Weider, Trainer of Champions since 1936, with millions of successful students.

CHAPTER 1 HOW IT ALL BEGAN .

As a Weider student you should be interested to know that the Weider System is the most popular and successful bodybuilding course in the world. Because of my 50 years of involvement in the sport, the Weider System is the basis of all modern bodybuilding and weight-training techniques. Literally everything in bodybuilding has sprung from the Weider System. My system has stood the test of time! The results speak for themselves.

It is not by accident that the Weider System enjoys such popularity. Champions I have helped train hold every important bodybuilding title. Among my famous stars are Arnold Schwarzenegger (seven times Mr. Olympia), Frank Zane (three times Mr. Olympia), Sergio Oliva (three times Mr. Olympia), Larry Scott (twice Mr. Olympia), Franco Columbu (twice Mr Olympia), Chris Dickerson (Mr Olympia), Rachel McLish (Ms. Olympia), Lou Ferrigno (Mr America, Mr. International and twice Mr. Universe), Corinna Everson (American Women's Bodybuilding Champion and threetime Ms. Olympia) and Lee Haney (American Men's Bodybuilding Champion, World Bodybuilding Champion and three-time Mr Olympia).

The full importance of their victories is better understood when one realizes that *each* began bodybuilding with no idea that he or she would some day be a worldwide star

Years ago such amazing physical transformations would have been impossible. In the early days only natural giants of physical power had a chance to excel. Weight training as a science was unknown, and the weights were huge unwieldly masses of iron, unlike our modern streamlined equipment.

There were no progressive methods of training, no way that poundages could be adjusted to the strength of an individual athlete and increased gradually, as is the case in modern-day bodybuilding. If you weren't big and strong to start with back then, there was no way that you could practice progressive weight training.

methods, primarily because the so-called experts of the day looked upon weight training as "dangerous."

As a result, bodybuilding remained a hit-and-miss affair for many years. Champions were weightlifters who had developed their bodies by performing basic strength exercises. Even the greatest bodybuilders of the time, however, failed to approach the measurements and strength levels now common among Weider students who have been training less than three years!

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Into the late 1930s and early forties, it was still the weightlifters who held the limelight, and all experimentation in the Iron Game was directed toward improving the lifting technique and strength of these atheltes. Bodybuilders could only dream of better training methods, of specialization programs, of top-grade magazines devoted to their sport and of someone interested enough to show them the way.

Since every champion of that day had a different training philosophy, the entire sport was in chaos. Still, bodybuilding managed to survive. The urge for strength and physical perfection felt by every man and woman today was as strong then as it is now

It was in such a confused era that I got my start in bodybuilding. I was born and grew up in Montreal. As a boy, I was weak and thin. By the time I turned 13, I had experienced the humiliation of physical inferiority. I knew what it was to be ashamed of having a weak body, knew the frustration of being pushed around. I dreamed of having a strong, healthy, well-developed body.

I was determined to better myself. So I decided to dedicate my entire life to bodybuilding, to the improvement of my own body and the bodies of others.

Looking back now, I feel that my weakness as a boy played a major part in the evolution of the Weider System. For having felt the deep stab of inferiority, rejection and disappointment, I know from actual experience just how much great strength, a well-muscled body and excellent physical fitness means.

Eventually, I obtained a set of weights, along with the courses of that era. Using these old-fashioned methods, I made some progress. These gains were the first of my bodybuilding career, and I was quite pleased with them. Weight training is better than any other form of exercise for improving the strength, health and appearance of the human body.

I recognized the logic behind progressive weight training. I could also see that someone had to take the lead. Moreover I realized that much research into resistance-training methods was needed and that, with hard work and study, bodybuilding with weights could provide the answer to the physical problems of millions of men and women.

I worked long and hard. I used my own body for experiments and learned through trial and error. I spent hours each day writing to the champions and weight-training authorities, analyzing their answers to my questions and comparing this information with my own reactions. Gradually a pattern of scientific bodybuilding emerged.

I was not surprised to learn that the exercises and methods of application used by the champions were vastly different from those in the courses sold with weight sets. Through trial and error, the champions also had learned better ways of training.

My biggest job was organizing all this material into a comprehensive, easily understood training system. From this problem arose the idea of formulating the Weider System, as well as my desire to someday publish the best magazines on bodybuilding the world had ever seen.

I dedicated my life to these two goals.

Unable to test all my theories personally, I enlisted the help of my friends, all champion bodybuilders. With our work as a base, I developed certain training methods-supersets, giant sets, rest-pause, etc.

The Mr. Canada contest for 1938 was coming up. I trained for it, using the methods my research indicated were best. I took second place in the contest, losing by only a half-point. A friend of mine, whom I had trained, won the top prize. As a result of our dual success, I was convinced that I had indeed discovered a better way of training, and the Weider System was born.

At that time I stepped out of competitive bodybuilding and weightlifting to dedicate my life to teaching others. Knowing that I had a vital message to bring to the world, I established YOUR PHYSIQUE magazine in 1940. This was soon followed by the periodicals, MUSCLE POWER, AMERICAN MANHOOD, MR. AMERICA and finally MUSCLE BUILDER & POWER-all dedicated to the sport of bodybuilding. Today MUSCLE BUILDER & POWER has evolved into MUSCLE & FITNESS, the premier bodybuilding and weight-training magazine in the world, recognized by champions, experts and the public alike as the Bodybuilder's Bible.

With my own magazines behind me, a following of millions of students and the cooperation of the world's best-built men and women, along with a cadre of dedicated scientists, I was able to compile records on every phase of weight training and body-building. In fact, the research assumed such a tremendous volume that I was forced to set up the Weider Research Group, whose entire function is to develop new and better bodybuilding programs and training equipment.

I had specially qualified writers interview the champions and analyze their training methods. Of course, this took considerable time, money and energy, but I am convinced that it was all well spent.

In the final analysis, the Weider System incorporates every modern training principle. And it shows you how to make muscle gains in a fraction of the time it formerly took.

Every great bodybuilding champion has contributed to some extent to the Weider System. Hundreds of thousands of students have done their part, too. My staff has worked unceasingly to make this, the twelfth reprinting of the Weider System in 45 years, the last word in scientific bodybuilding advice.

Indeed, no other course in the history of bodybuilding has had so many work so hard to produce it. Champions like Arnold Schwarzenegger, Lou Ferrigno, Franco Columbu, Lee Haney and Frank Zane have carried on in the tradition of the giants of the past, men like Larry Scott, Reg Park and Clancy Ross. Champions from the field of powerlifting have revealed to me the secrets of their superhuman strength. And the Weider Research Group has put all these ideas to the test, to make certain that they work on everyone.

I urge you not to deviate from these printed instructions in the slightest until you have thoroughly mastered the Weider System,

and particularly the Weider Instinctive Training Principle. Each detail of your training as set down here has a purpose, and it's for your exclusive benefit.

This in no way means you shouldn't read MUSCLE & FITNESS, SHAPE, FLEX and MEN'S FITNESS. In fact, I urge you to study each issue of these magazines. As soon as anything new is learned or developed in the area of bodybuilding, my magazines will bring it to you. MUSCLE & FITNESS, SHAPE, FLEX and MEN'S FITNESS serve as monthly updating courses for the Weider System.

For the first six months of your Weider System training program, however, you should not follow any of the exercises or training routines that appear in these four magazines. You *must* stick to this course exactly as outlined for the prescribed length of time. After that, you will have gained the experience and the physique needed to benefit from the instruction that appears in my magazines.

Don't forget that, as my student, if you need personal assistance at anytime, a letter will receive prompt attention. If you have a question, ask me!

I hope you have enjoyed this brief account of how the Weider System evolved. As you can see, since I was 13, bodybuilding has been my life. My goal is to bring you the latest information on bodybuilding so you can avoid my early mistakes and those of the champions, progressing more quickly and safely toward your goal of having a strong, well-muscled body. If you have the determination and desire, you could even become another Weider superstar. Don't let us down!

"To concentrate -- to carefully focus your intensity, your mental energy, your very lifeforce -- is the beginning of becoming a champion."

CHAPTER 2 WHAT THE IRON SPORT WILL DO FOR YOU

he desire for good health, physical attractiveness, muscular strength and self-confidence lives in every man and woman. Despite their innate urges, however, millions of otherwise rational individuals suppress their desires for health and physical perfection. They follow an unnatural life pattern that makes them old before their time, limiting their effectiveness in society. Physical expression through strenuous exercise is as old as mankind. The fittest and smartest among the cavemen not only survived but ascended to the leadership of their groups.

In ancient Greece a wrestler named Milo found a unique way to increase his strength and physical fitness. He shouldered a young bullock and carried it the length of the stadium at Olympia, a distance of more than 200 yards, performing this feat daily. As the bullock grew progressively heavier, Milo became progressively stronger. By the time the animal was fully grown, Milo had become the strongest wrestler in Greece. For 24 years he was undefeated in the ancient Olympic Games, as well as the Pythian and other Panhellenic athletic events.

The progressive-resistance exercise Milo used is identical to the principle behind modern weight training. It's called the Weider Overload Training Principle, and it consists of putting progressively greater loads on a muscle, thereby forcing it to become larger and stronger. Most bodybuilding historians consider Milo the father of progressive weight training.

Eugen Sandow, the immortal strongman and a world advocate of healthful living at the turn of the century, wrote a book called Life Is Movement. The title expresses the innate requirement all human beings have for exercise. By following this instinct they are exceedingly healthy in their natural environment. Only humans, of all living creatures, willfully violate the natural laws of physical fitness. And as a result, they suffer the tortures of the damned, as one part of their abused bodies after another breaks down and succumbs to aging, injury and disease.

Modern physical-fitness authorities recognize that today's hightempo lifestyle makes natural living impractical for most individuals. Free time of any sort is often at a premium. So those physical-fitness measures taken by the individual in modern society must be relatively brief and, consequently, must produce quick results.

Not surprisingly, the trend in recent years among qualified physical-fitness instructors has been away from time-worn and time-consuming calisthenics and free-hand movements. In their place, the use of barbells and similar equipment that depends on the use of progressive resistance has become universally accepted as the only practical way of reversing humankind's physical decline. Both physiologists and medical doctors have concluded that, in providing strength gains and muscular development rapidly, weight training meets the exercise requirements of most individuals very effectively.

There are more than 20 concrete benefits that can be gained by anyone who trains regularly and progressively with weights. Weight training:

- 1) Increases muscular strength.
- 2) Increases muscular endurance.
- 3) Is an outstanding means of body shaping.
- 4) Increases bone and ligament strength, cartilage thickness and capillary density in the muscles.
- 5) Improves health and physical fitness.
- 6) Improves sports performance.
- 7) Increases flexibility.
- 8) Increases power and speed.
- 9) Helps relieve the stresses and tensions of everyday life.
- 10) Promotes a positive self-image.

- 11) Teaches discipline and motivation that carry over into all other areas of life.
- 12) Helps control bodyweight and reduce bodyfat.
- 13) Strengthens your heart, intensifies metabolism levels and normalizes blood pressure.
- 14) Can increase your longevity.
- 15) Improves the quality of your life.
- 16) Helps prevent many medical problems such as osteoporosis.
- 17) Increases both hemoglobin level and red cell count.
- 18) Is an appropriate activity for men and women of all ages, can become a valuable couple and/or family activity.
- 19) Is an excellent form of rehabilitation for muscle and joint injuries; can be used by handicapped individuals who have at least partial use of their arms and/or legs.
- 20) Has been proven to reduce cholesterol levels.
- 21) Can be a competitive outlet for both men and women (champion p rofessional bodybuilders earn a good living from their sport).

Despite the well-documented benefits of weight training, there are six myths still associated with it:

- 1) Weight training makes a person "muscle-bound." It is a scientific fact that weight training actually increases flexibility. Studies by the score have been published since the early 1950s exploding this myth. Even a gigantically muscled superstar like Weider-trained Arnold Schwarzenegger, is far more flexible than the average person. Muscle-bound? No way!
- 2) Weight training slows a person down. This is false. Virtually all professional and Olympic athletes-regardless of their sport -use weight training to improve their performance. If it slowed them down, these athletes would never train with weights. And it's been scientifically proven that a strong muscle can contract much more quickly than a weak one. Robby Robinson (Mr. America, Mr World, Mr. Universe and a professional champion) has run 100 yards in 9.5 seconds.
- **3) Weight training makes a woman look masculine.** Actually the muscle a woman adds to her body enhances feminine allure. Women have only a small amount of the male muscle-building hormone testosterone and an abundance of feminizing hormones like estrogen. This hormonal ratio prevents the development of masculine-appearing muscles through weight training.
- 4) Muscle turns to fat as soon as you stop bodybuilding training. This is the myth we hear most often! Muscle is muscle and fat is fat. They are two different types of tissues! It is physiologically impossible for a muscle to turn to fat. If you cease to overload a muscle group, however, it gradually loses mass and strength but it never quite returns to its original prebodybuilding state. The only way you can become fat is to systematically overeat for a long period.
- 5) Weight training wrecks the joints. In point of fact, bodybuilding stresses the joints much less than many forms of exercise. If you warm up correctly before a weight-training session and follow safety procedures (outlined later), you can train as heavily as you wish with little danger of injuring your back or knees

or any other joint. Weight training, in fact, helps to thicken ligaments and tendons, making joints stronger!

6) Bodybuilding training stunts growth. Scientific studies have demonstrated that all types of physical exercise-including weight training-actually stimulate height increases. Although there are many great bodybuilders of short stature, such as Danny Padilla (Mr America and Mr. Universe), this situation is true only because bodybuilding competition does not discriminate against shorter men and women the way a sport like basketball does.

While the majority of my students aim for the highest goals of bodybuilding-strength development, physical fitness and optimum body appearance-the benefits of weight training are much wider-reaching than large muscles and strength. As an example, weight training will help correct overweight and underweight conditions, particularly when used in conjunction with the dietary tips I will give you later in this course. So those who suffer from an inferiority complex because of their weak bodies will find that this feeling is quickly replaced by an improved selfimage and a feeling of pride in their bodies.

"Consistency is the key to muscle growth. You can't gain anything in the real world without this consistency of effort. Discipline and dedication make up consistency. It's a quality all champs have!"

Busy executives, pushed to the limit by mental pressures, find that through weight training they can build a stronger attitude to life and a limitless energy reserve. Because weight training and bodybuilding make you physically *and* mentally stronger, your success and enjoyment in life will be multiplied many times over. Athletic hopefuls in all sports will find that the new power, body

Athletic hopefuls in all sports will find that the new power, body control and physical drive gained through bodybuilding will make them better in their specific activity, as well as keep them in top physical condition during the off-season. The strength built through weights will make them less likely to be injured.

Weight training in recent years has become an exact science. The principles behind it were scientifically established by our champion bodybuilders and a variety of researchers who specialize in strength and fitness research. And, as in every science, there have been constant advances as researchers have made new discoveries.

The spearhead of bodybuilding research has always been the Weider Research Group, of which I am Director. The group is constantly at work with leading bodybuilders, powerlifters, coaches, physiologists, biochemists, biomechanics specialists, sports psychologists and other scientists researching new training techniques from all parts of the world. Each time a new technique has been discovered and given a thorough trial, it is included in the Weider System. You have my guarantee that the techniques included in the Weider System bring results. If they didn't, I would never publish them.

There are case histories of thousands of bodybuilders-both men and women-along with testimonials stating that weight training has aided them in every endeavor in life, including overcoming specific medical and psychological disorders that did not respond to the usual treatment. I make no claims of weight training having curative properties. I am simply passing along what has been reported to me by those who have discovered such benefits from using Weider methods.

Of course, there is a right way and a wrong way to use barbells and dumbbells. There are other weight-training systems that are old-fashioned. We take pride in the fact that, since its inception in 1936, the Weider System has always maintained a completely progressive attitude, constantly searching for better ways to apply the science of weight training. The heart of my system is its progressiveness. I take you through beginning, intermediate and advanced stages. I do this carefully and slowly, so that your growth in size and strength is continuous.

Besides the research my people have under way in the United States and Canada, I work with top experts who are doing research in many countries around the world such as Brazil,

"When in hard training depend upon protein to feed your muscles, helping them grow, and upon carbohydrates to provide the glycogen for fuel, or they'll look flabby. A hard-training program is only as good as your diet!"

Argentina, South Africa, Germany, Belgium, France, England, Italy, India and the Philippines. At the Weider Research Group, our work is never done!

As noted, this is the twelfth revised publication of the Weider System in the past 45 years. So much has happened in just the last five years that the entire text of this course has been revised.

Therefore, you are benefiting not only by having my latest instruction, but you are also realizing the fruits of my lifetime of work in bodybuilding across America and throughout the world. All you need is the determination to follow my advice. If you do, there is no reason why you, too, should not join my successful students and great bodybuilding champions.

Put your trust in me. Follow my guidance and you, too, can have the body you want, the one Nature intended for you in the first place!

MEN VS WOMEN

I'd like to answer several questions about women and bodybuilders that people have asked me over the years. It's no secret that there has been an explosion of interest in weight training among women the past few years. Today there are almost as many women pumping iron as there are men!

There are some physiological differences between men and women in regard to bodybuilding. In general, men are stronger than women and have greater endurance, primarily because they have larger hearts and their blood has more oxygencarrying molecules. Women are as strong in their legs as men when you consider their lower bodyweight. Many men train hard with weights, while many women shy away from going all-out in the mistaken belief that they might harm their bodies, or might make them appear masculine.

I have often been asked if the Weider System can be used by women, especially now that more and more women are taking up weight training and bodybuilding for women is becoming a popular and highly visible sport. The answer to this question is an emphatic Yes! All you have to do is look at some of the great female Weider champions, to see what I mean!

There is no doubt that men and women are different anatomically and physiologically. But in many ways, they share a common physiological system. For example, women have basically the same complement of 600-plus skeletal muscles as men. Those muscles need exercise to remain strong and healthy, and they respond to progressive resistance training by becoming firmer, stronger and shapelier.

The only note of caution I have for any new student (man or woman) is not to do too much too soon, especially if you're not used to strenuous exercise. Remember this-progressive resistance weight training is geared to having you work to your limit-never beyond it.

Other than this caveat, a woman's body is designed to flourish when exposed to the proper program of exercise, recuperation and diet, the same as a man's. And when you follow the Weider System, you can look forward to achieving Weider results!

Differences in the Sexes Taken into Consideration by the Weider Training System:

- On the average, men are larger and stronger than women. Maximum oxygen intake is larger in men.
- Men have greater endurance due to larger hearts and more hemoglobin. Maximum oxygen intake is larger in men.
- On the average, women are more flexible than men.
- Women usually have higher pain thresholds than men.
- Men are proportionately stronger in their upper bodies.
- · Women are proportionately stronger in their lower bodies.

AGE FACTORS

I'm constantly amazed when people ask me what is the "right" age to begin bodybuilding. My answer is that any age is the right age to start bodybuilding, provided you do it correctly. Children as young as 10 can train with light weights along with their parents. At the other extreme, I have many studentsboth men and women-well past retirement age who enjoy their weight workouts. Obviously, however, the older you are, the less you can expect to achieve through bodybuilding, because your body simply slows down with age.

The optimum age to begin bodybuilding training -- if you want to become a champion-is between 15 and 30. By the age of 16, you will be mature enough to make good gains from your bodybuilding training. And at 30, you will still have enough time to reach maximum development before age starts gaining on you.

Bodybuilders in their late teens have developed tremendous physiques. One outstanding example is Casey Viator, who won the Mr. America title at the record age of 19. Casey has gone on to win several IFBB professional competitions.

Numerous bodybuilders over 40 have built superb physiques.

Vic Downes didn't touch a weight until he was 32, yet he won the World's Most Muscular Man title at 40. And Ed Corney reached his all-time best condition at 46. Albert Beckles won the World Professional Championship at 53! So it's never too late for you to begin regular weight training.

Bodybuilding for All Ages:

- Youngsters under 16 should not lift maximum weights. Instead, they should use lighter weights for 10-15 repetitions.
- Youngsters under 16 should not do exercises such as squats, deadlifts and overhead presses with heavy weights.
- Older individuals must respect their joints and soft tissues.
 With advanced age, lighter, rather than heavier, weights should be stressed. However, those who train consistently will find they can still handle heavy weights into their late fifties and early sixties, losing only a bit of strength as they grow older.

PHYSICAL EXAMINATIONS

To be perfectly safe, anyone who has been physically inactive for more than a year as well as anyone who's over 35 should have a thorough physical examination before he or she starts a bodybuilding program. Such an exam is intended to detect heart problems and other physical irregularities before they can cause you harm. I also recommend an electrocardiogram for everyone over 40 who plans to begin weight training. It's vitally important that you follow the advice of your physician on weight training and other exercise. You should follow your doctor's advice even when it's contrary to my own. Your doctor has examined you. I haven't. I should point out, though, that my courses are prepared to help anyone who's in good medical shape. The examination should include also a nutritional

assessment. It will help you to support your bodybuilding program

YOUR SET OF WEIGHTS

with the right diet.

Your Weider barbell and dumbbell set has been manufactured from the finest available materials for lifetime service. The assortment of Weider plates enables you to increase your training poundages slowly as you gain strength. The set is constructed to work hand in hand with the progression in my system.

The short 12- to 14-inch metal rods are called *dumbbell bars*. You load them with the disclike weights called *plates* to form dumbbells.

The four- to six-foot metal bar is called a *barbell bar*, and you load it with the plates to form a barbell. The plates are securely fastened by clamps called *collars*. Some barbell and dumbbell bars are encased in hollow metal tubes called *sleeves*, which allow the bars to turn easily in your hands while you're exercising. Cross-hatched grooves called *knurling* are cut into the sleeve or the bar to help your grip.

The above pieces of equipment are the ones most commonly used in weight training simply because the barbell and the dumbbell are still the *best* means to gain size and strength.

CHAPTER 3 GETTING A HEAD START

know you're anxious to get right down to the serious job of starting to build your body. However, you must not plunge headlong into the exercise program until you have read from cover to cover all the advice contained in this course. Only then will you have enough of an overview of my entire system to be ready to start your first workout with a firm understanding of what you're trying to accomplish. Only then will you understand how to train to avoid strain and periods of little or no progress.

HOW TO EXERCISE

Keep in mind that, as a beginner in bodybuilding, you will gain nothing by plunging into a heavy program. You must make certain to not only follow my advice and handle fairly moderate weights, but also alter any exercise that causes you the slightest pain: Reduce the weight 25-30% and try it again, slowly working up the poundage. You will usually find that you can do the movement with no discomfort if you work up slowly.

Some beginners are weak in certain bodyparts. I have taken all this into consideration in outlining the courses, so if you are extremely underpar, my lightest recommended poundages may still be too heavy for you, and you should use less weight. This will in no way hinder your progress. Some of the greatest bodybuilding champions were once much weaker than the average man or woman.

You must expect mild muscle soreness after your first few workouts. This merely means that the exercises are reaching muscles that haven't been used vigorously for a long time, and that they are being stimulated to grow. However, if you dress warmly enough during your workout, take a warm shower after working out, and then apply Weider Deep Relief $^{\text{TM}}$ an effective athletic skin rub, to your body, you will keep the soreness at a minimum. After a few workouts it will disappear altogether.

The way in which you breathe is important in bodybuilding. If you hold your breath as you exert yourself, for example, you could faint and seriously injure yourself when you fall. Therefore, you should adhere to the following rule as you lift weights: **Breathe in as you lower the weight and out as you raise it.** After one or two weeks of consciously following this rule, you will make the breathing pattern automatic and you should never again need to be conscious of how you breathe.

Generally speaking, you should exhale when you exert yourself in an exercise and inhale when in the relaxation phase. Take the squat, for example. Breathe in while squatting. Then exhale when rising back to the starting position, that part of the movement being the most strenuous. Soon the habit of correct breathing will become fixed.

As much as possible, you should perform all exercises smoothly and rhythmically.

Make sure that all your movements are complete actions. In other words, fully extend and contract the muscles involved throughout the entire range of motion. In overhead exercises, you will balance the weight much better if you keep your eyes fixed on a point about a foot above eye level on the wall as the bar is being raised above your head and lowered.

Study every word of instruction in this course. Make sure that you understand each detail before you start to exercise. Study the illustrations and perform each exercise correctly.

It's a good idea to keep a notebook handy to jot down the reps and poundages you use. The training log can be used to uncover reasons for overtraining or plateauing as well as serving as a progress chart. Beginners and advanced bodybuilders alike can benefit from its use.

HOW TO WORK OUT

You must remember that exercise alone does not build muscle mass. Other factors such as diet, the amount of sleep and rest you get, the general regularity of your life, etc., also count. I will give you everything you need to know about sleep, diet, nutrition and emotional control later in the course.

I want you to train three nonconsecutive days per week: Mondays, Wednesdays and Fridays - or Tuesdays, Thursdays and Saturdays. You must train regularly three days per week for the first three months. After that, you can increase your workouts to four or five times weekly. Overall, consistency in training is the key to bodybuilding success.

How to get the best training results:

- · Get plenty of rest and sleep
- Initially, train three days a week
- Train on alternate days
- Arrange your schedule so that you train at the same time each day
- Eat good-quality and properly prepared foods, high in protein, vitamins, minerals and unrefined carbohydrates
- Drink plenty of pure water (at least 12-16 eight ounce glasses daily)
- Maintain the constant positive attitude that you will succeed in building the body you always wanted.

WHERE TO TRAIN

Since you have purchased this Weider course, you have undoubtedly decided to do your bodybuilding workouts at home. A home gym offers privacy and the chance to train at your convenience.



My system of creating a great body can be followed in a bodybuilding gym or in your own home. All you need is a multi-bench, sit-up board, and a barbell and dumbbell set.

"Allow at least six months of consistent, scientific training to develop a sound base of strength and fitness. Specialized training before a foundation is laid can result in uneven development."

Most of the active champion bodybuilders started training in home gyms. A good example is Lou Ferrigno, who trained in his parents' basement in Brooklyn for three years before venturing into a public gym. And Franco Columbu, DC, actually won a Mr Olympia title after training in his garage!

You can build your own professional-quality home gym from the ground up using Weider equipment. Initially, you will need an adjustable barbell and dumbbell set, then an adjustableincline exercise bench and a pair of squat stands. Later you can add leg machines, abdominal boards, pulleys, etc.

This may seem like a big outlay, but home-gym equipment is a one-time expenditure. In contrast, if you train in a commercial gym, you must pay dues on a monthly or yearly basis. And even though you take most of your workouts at a public gym, you will find a home gym convenient when you need to get in a workout you otherwise would miss.

You can work out any hour of the day or night. Boyer Coe, a World Champion, trained for several years from 2-4 a.m. each day. It was the only time Boyer could find to fit his training into his busy scholastic and business schedule.

Most bodybuilders train in the evening, after school or work, although a fair percentage train either in the morning or during the day. A good share of the top men train in the morning, however. You should pick a time when you can train regularly each workout day. I feel that you should pay attention to your body's energy levels. When your energy level is at its highest, that's when you should try to train.

The most important factor in your bodybuilding success is consistency. Getting regular workouts is a necessity for becoming a Weider champion!

WHAT TO WEAR

Two factors must be considered when deciding what to wear when working out. First, your clothing must be loose enough to allow you a full range of motion. Secondly, it must be warm enough in cold weather and cool enough in warm weather to keep you comfortable during a workout. Most importantly, you should dress in whatever clothes make you feel good when you train.

WHEN TO TRAIN

Most commonly, bodybuilders wear shorts and Tshirts. Warmup pants and jackets should be worn in colder weather. Shoes are also essential, because they protect the arches of your feet from compression injuries while you are lifting heavy iron or, heaven forbid, from dropping a weight on an unprotected toe!

I also suggest that you wear a Weider weightlifting belt for protection when you are training heavy (and especially when doing heavy overhead presses, deadlifts and squats.

A WORD OF CAUTION

Most beginners are eager for fast development of some showy muscles, such as the arms, chest and shoulders. Sometimes they don't follow my regular courses, specializing instead in these showy bodyparts. You must not do this. Never neglect your legs or any other bodypart.

The purpose of specialization is to bring under-par parts up to the rest of the body It will take at least six months of consistently hard training before these under-par sections will be revealed At that time, you can specialize in them but not before.

I urge you to follow these instructions, if you don't you will hold back your bodybulding progress and possibly develop an unbalanced and unshapely body, which is not the purpose of this course, nor is it the mark of a championship physique. If you train wrong, you will have only yourself to blame!

EXERCISE FORM

As I've already mentioned, you must move a weight over its full range of motion in every rep of every exercse Otherwise you'll just be cheating yourself by not developing your muscles' *full* potential For the first 3-6 months of your training, it's absolutely necessary to do each repetition of a movement in strict style that is, without assistance from other parts of the body This means you must not kick your legs of bend your torso to get a weight up to the finish position of a movement Thinking of "treating" robs your working muscles of much of the resistance they need to grow faster.

Later, when you are more experienced, you can begin to use cheating form to make a set harder on your working muscles Beginning bodybuilders, however, invariably cheat to make a set easer. so they should concentrate on doing strict reps every set It's important to develop correct habits right from the start.

Do not cheat. It's important that you try to form a mind-to-muscle link when you train This mental concentration helps err sure that you use all your muscle fibers and maintain proper form so that you don't injure yourself I will elaborate on mental concentration later in my course.

TRAINING TEMPO

I would like you to rest only 60-90 seconds between sets This fast training pace will keep your body warned up throughout your workout so you wont risk injury and so you keep valuable blood in your muscles so you can grow larger and stronger

Another facet of training tempo is how fast you raise and lower the weight while doing an exercse. In general, you should move the bar slowly in a controlled, rhythmic manner throughout

the exercise by lowering it even more slowly than you raise it 2-3 seconds to raise it, four seconds to lower it.

Why is it so important to train slowly By training slowly and steadily you establish a training "groove". By learning to control the movement carefully you will be able to concentrate and isolate the muscles that you re training You will also avoid in fury and develop the large powerful muscle fibers that are coordinated by the nervous system to work intensely

Once you learn the right exercise patterns in your training, you can experiment with faster workouts However, it's always advisable not to train too quickly because you lose the feel of the movement, sacrificing proper form and may injure yourself

STARTING WEIGHTS

In a later chapter I will give you a good beginning bodybuilding routine, and III suggest appropriate starting weights for bath men and women These starting weights will be suggested in terms of percentages of your own bodyweight These percentages will be listed under columns marked "% Men" and "% Women" You need only choose the appropriate column and determine what percentage to use.

The starting weights I suggest will apply to the "average" man or woman. If you have been active physically, the weights might be too light for you This will be the case if you are able to complete the required number of repetitions tot each set easily.

Ifs also possible that the recommended starting weights will be toe heavy for you, since individual strength levels vary so widely If you have to struggle to complete the required number of repetitions for a set the weight should be reduced by 5-10 pounds.

Since you will very quickly develop an instinct for choosing your own training weights, I will recommend starting poundages for you only at the beginning level of training Then you'll be able to choose for yourself!

After training for a while, you can test yourself in a maximum repetition (the amount of weight you can lift once without cheating or straining too much) Once you've determined this, you can vary your training weights at different percentages when you staff out, you'll find that your natural training percentage is about 60% of maximum Later on, you may vary your repetitions and percentages so that you occasionally train at 70-80% of maximum. As you get stronger and more maturewith your training, you can occasionally train with up to 90% of your maximum! However, remember to be patient for your strength and muscle size gains.

HOW MANY REPS?

Together with my coterie of bodybuilding champions through out the world and at the Weider Research Group, I have deter mined that certain rep ranges yield specific training results. Lower reps (1-5) primarily develop strength and power, medium reps (eight) produce muscular size, definition and local muscle endurance, while high reps (15+) primarily develop muscular endurance and definition, and less muscle size If you do very high reps (over 20) and train in a nonstop crcut fashion without any rest between sets you can develop heart and lung endurance I recommend exercising holistically, which means doing a variety of sets and reps for complete fitness and development I will discuss this princple later in my course

BREAKING IN

To prevent extreme muscle soreness or injuries, it's essential to break into a weight training program slowly During your first workout I want you to do only one set of each recommended exercse Continue to do only one set per movement for the first week of your workouts with light weights

During the first month, do a set of each exercse Slay with one set of each exercse and gradually work into the full two sets (the second month!) Bodybuilders in good initial physical conditon can begin doing the full program at the staff of the third week. If however, you feel that you need four to eight weeks to work up to the full program, allow this amount of time Don't try to do more sets until your strength and endurance have increased sufficiently to handle the greater load.

You should also be cautious about adding weight to any exercise before you start your fourth week of training Adding sets or weight too quickly will inevitably result in picking up bad exercise techniques, which may lead to injury and an unbalanced development.

		Day 1	Day 2	Day 3	
Week 1	Set 1: Set 2: Set 3:	50x8 50x8 50x8	50x10 50x9 50x8	50x11 50x10 50x10	
Week 2		50x12 50x11	50x12 50x12	50x10 50x12 50x12	
Week 3	Set 3: Set 1: Set 2:	50x10 55x10 55x8	50x11 55x11 55x10	50x12 55x12 55x11	
Week 4	Set 3: Set 1: Set 2: Set 3:	55x8 55x12 55x12 55x11	55x9 55x12 55x12 55x12	55x10 60x9 60x8 60x8	

Each time you change to a new routine, you should also take a week to break into your new workout If you follow these suggestions you should keep muscle soreness to a minimum, plus make fast progress toward the physique you desire Warming up and down also helps to avoid soreness, as does heat, cold therapy and stretching after your workout More on this later.

PROGRESSION

Based on the Weider Overload Training Princple progression is the heart and soul of your bodybuilding training. There are four basic ways you can progressively increase the intensity of your workouts (Remember, these methods to increase your workout intensity should only be done after you have completed the exercses and routines described in the first six wall charls and have put in a good six months of hard basic training).

- 1) Increasing the poundage used for a particular movement
- 2) Increasing the number of repetitions you do with a set poundage for a particular exercse
- 3) Keeping the weight sets and reps constant far an exercise but decreasing the length of rest intervals between sets.
- 4) Increasing the number of your sets.

In actual practice, No. 3 is normally reserved for champions preparing for a contest or anyone tryng to peak their muscular development At all other tmes, bodybuilders use a combination of increasing poundages set and reps to progressively intensity their training.

If you look at my workouts later on, you will see a suggested range of repetitions for each exercse (e.g., 8-10) In this case, the lower figure is called a *lower guide number*, while the higher figure is called an *upper guide number*.

To progressively increase the intensity of your workouts, I want you to begin by doing the lower guide number of reps Then each workout, if you can without sacrificing strict style add a rep to this number until you reach or exceed the upper guide number Then add weight to the bar (2½-5 pounds for upper body exercises, 5-10 pounds for leg movements) Go back again to the lower grade number of reps, only to begin working up again to the higher guide number.

Let's assume that you're to do 8-12 reps of the military press. In that case, four weeks of progression on this exercise ("40x8" denoting one set using 40 pounds for eight reps) would look like this.

	Day 1 (Monday) Day 2 (Wednesday) Day 3 (Friday)							
Week 1	40x8	40x9	40x10					
Week 2	40x11	40x12	45x8					
Week 3	45x9	45x10	45x11					
Week 4	45x12	50x8	50x9					

When you're asked to do more than one set of an exercise, which will usually be the case, you should do all the required reps and sets before moving on to the next movement. You should also reach the upper grade number for all the required sets before you add weight to the bar.

Here is an example of how progression occurs when you're doing three sets of 8-12 reps in the bench press.

By faithfully progressing in your weight workouts, you'll continually develop greater strength and muscle mass. As an example, Corinna Everson, one of my favorite Weider title holders,

a 140-pound Ms. Olympia winner, has bench-pressed her body-weight for 17 repetrtions!

MENTAL FACTORS

Before you start your workouts I would like to make you aware of a number of simple rules that can help you get the most out of your workouts To begin within Chapter 5, you will learn how to program your muscles so that, as you move in any exercise, you develop the muscle that you are working to its maximum In bodybuilding we call this 'finding the groove" You must realize that bodybuilding has as much to do with the power of your mind as it does with the power of your muscles!

When you perform an exercise, you should mentally track the movement You should continue to do this at all times, even after you've mastered the exercise technique.

Concentrate fully on only your working muscles as you train. Imagine that they are exploding right through your skin as you fully extend and contract them through the range of motion. If you cant imagine this, watch yourself train in the mirror. A lot of my champions find this helpful When you master complete concentration you will grow even faster. Shut out all external influences that might bother you, and focus on the feeling in the muscle as you perform each set.

All my champions and successful students develop tunnel vision towards their goal of a bigger stronger body. To do this, you should use my creative visualization technique. To program your subconscious for success, the best time to use creative imagery to convince your body and mind that you will work unbelievably hard to get big and strong is a time of day when you can completely relax and think about the body you want. Spend about 15 minutes before training or during lunch break or before bedtime visualizing your body as a massive hulk with sharp muscularity. Imagine every peak every fiber and vein resell explode with muscular power Imagine dense thick muscularity as no person has ever had it before. Imagine you are a moviemaker putting it on film. If you learn to do this successfully, in time you will develop the kind of body you imagine.

My visualization technique can be used to improve yourself in business, sports, social life and school. Use this technique often to become a champion in any endeavor!

TRAINING PARTNERS

Some bodybuilders prefer to train alone, while others like to train with a partner. Frank Zane is a good example of the first type of bodybuilder, while Lou Ferrigno is typical of the second.

There are good arguments for both approaches. You should make your choice according to your personal temperament. Training alone usually appeals to the introvert, while the extrovert usually prefers to work out with a partner.

When training alone, you can adapt your workouts totally to your own needs, but with a partner you always must make some concessions. On the other hand, a partner can give you forced reps and help you with other advanced Weider training techniques.

He or she can also provide you with a degree of moral support. And finally a training partner waiting for you can provide the incentive to do a workout you might otherwise miss and even provide energy through positive vibrations that can make you work harder and push you on to new, greater heights.

CHAPTER 4 INDIVIDUALIZE YOUR TRAINING

I have taken every precaution to update my training system so as to incorporate all of my most recent training findings. As you'll recall from earlier chapters, I was very careful to explain that beginners should to allow certain exercises in a certain order and for a designated number of sets and repetitions. This is the best way for novices to proceed without overtraining or injuring themselves and learning how their muscles function and respond to exercise.

After about 4-8 weeks of training, you will begin to understand the rudiments of the Weider Instinctive Training Principle, which I will develop fully for you later on. You will notice that there are days when you seem to have more energy and strength than on other days. On those days when you seem to be dragging, back off on your training intensity so that you avoid over training and possible injury. However, and this is critical, make sure you re not just being lazy' Don't give in to sloth If you are having an emotional concern such as worryng about a test at school, or you didn't get enough sleep or food, that's different. So understand your body energy. If you are feeling particularly strong on a certain day, my initial exercise routine may be too easy! Therefore, you should vary your training weights, according to your energy.

Remember, the secret to greatness is really the judicious use of my Instinctive Training Principle, which is about *individual train*ing. Only by working with yourself can you continually improve and maximize your results. Let me explain how some of my champions do it. World champion Tom Plate, the man who used my principles to build his awesome legs, piles on 500 pounds in the squat on his high energy days and drops down to 400 pounds on his weaker days. Sometimes he even uses 600 pounds! It all depends on how he feels on that workout day. Corinna Everson, Ms Olympia and current women's superstar, may use 160 pounds for reps in the bench press one day and only 120 pounds on another. Berth Fox, an incredibly strong bodybuilder, uses 140-pound dumbbells for presses one day and 100 advocate on a different day

Each champion adjusts his or her workout weights according to their available strength and energy. Make sure you also train this way, adjusting your workout weights according to how you feel on your workout day.

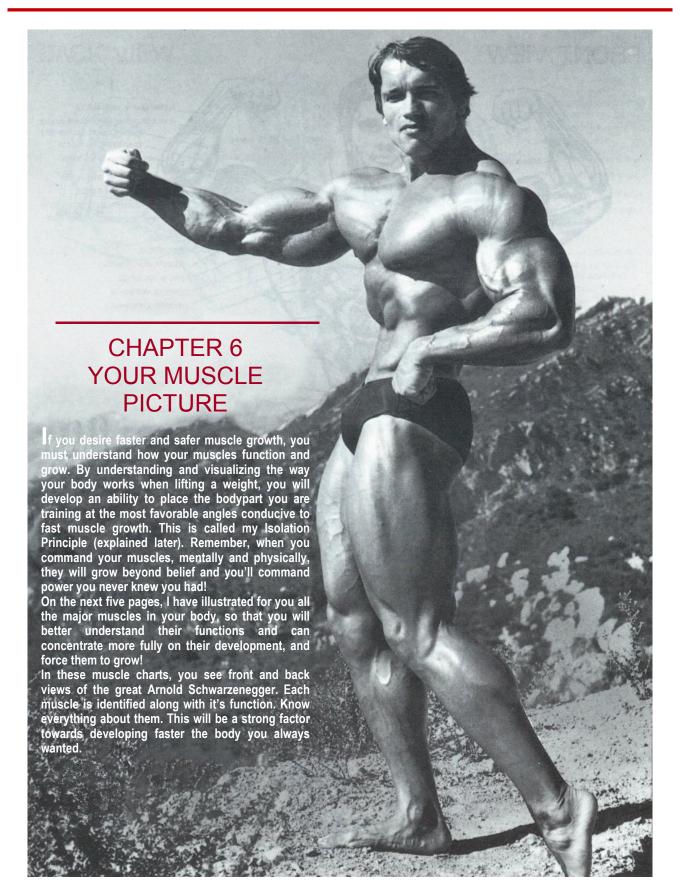
CHAPTER 5 BODYBUILDING LINGO

Before I go into the actual description of bodybuilding exercises, there are a few basic bodybuilding terms that you should be familiar with to help you better understand and utilize this course.

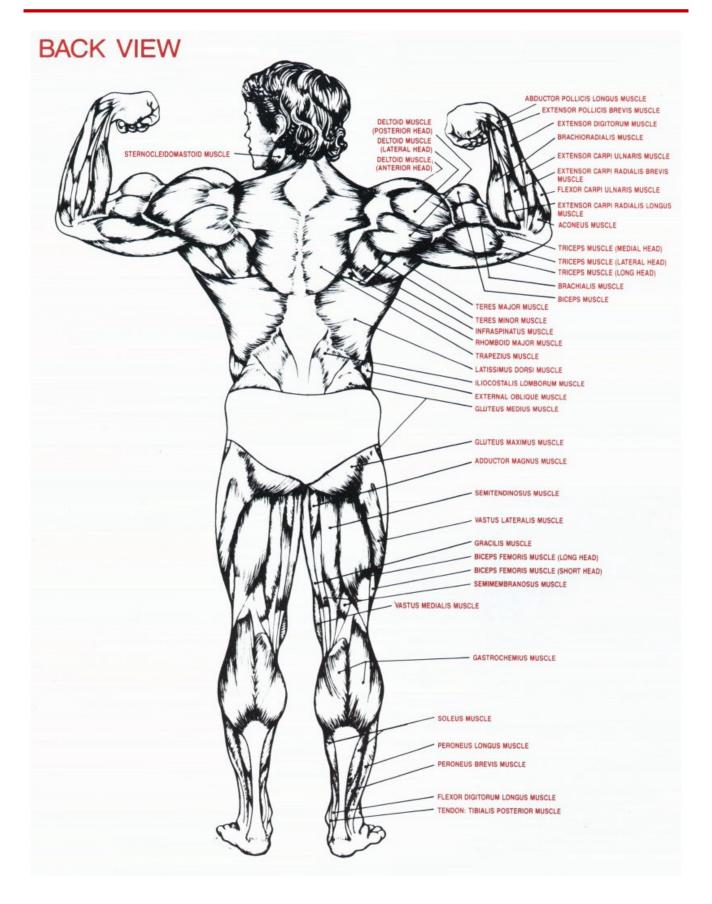
- 1) Anabolic Steroids These are synthetic drugs used to enhance protein retention in the muscles but more importantly to help many medical conditions. Every drug has a side effect, and in the case of steroids, these drugs have many, many dangerous side effects. You should avoid these drugs at all costs, because they have been implicated in liver cancer and heart disease. Do not allow yourself to be persuaded to use any drugs whatsoever.
- 2) Balance In physique terms meaning good overall proportion in your body. All your muscle groups are evenly developed.
- **3) Burns -** A mild discomfort in the muscle after it has been pushed to its limit. It's not harmful and *merely means the* nerves around the muscle are sensing the accumulation of fatgue products and that the muscle is shading to demand more oxygen.
- **4) Cheating -** Enlisting the aid of muscles rather than the ones you are directly working to get the bar past the sticking point. Should be used to make a set harder, not easier.
- 5) Cutting Up Losing body fat to bring out muscular detail.
- **6) Definition -** Having muscles that are highly visible and devoid of excess fat.
- 7) Contractions In bodybuilding lingo this refers to the muscle shortening against resistance. When you do a curl, your biceps contract
- 8) Density The hardness, thickness and heaviness of your muscle.
- **9) Hypertrophy -** Muscle enlargement from training Synonymous with muscle growth.
- **10) Groove -** The best path that a bar or dumbbell takes during an exercise so as to maximally isolate your muscles.
- **11)** Flexion A word that usually means bringing a distant pan of the body toward the center of the body or moving the insertion of your muscle toward the origin of your muscle. Flexion of your biceps moves your hand towards your shoulder.
- **12) Flush -** Pumping blood into a muscle through high *repetition* exercise to produce a temporary engorgement of the muscle.
- **13) Extensions -** The opposite of flexion Action moves the distant bodypart away from the center of the body or the origin of your muscle.
- **14) Intensity -** How hard you're working. Percentage of your one rep maximum.
- **15)** Lean Body Mass A term for the *percentage or* amount of pure muscle in your body.
- **16) Mass -** The size of your muscles.
- **17) Muscularity -** The combination of mass and definition.

- **18) Overload -** Progressively working your muscles harder and harder Usually accomplished by gradually adding more weight to the bar
- **19) Mind-Muscle Link -** Refers to extreme concentration and getting a mental picture of your muscles contracting and extending. Learning to isolate and control the muscles you're training. Transmitting energy from your mind to your muscles.
- **20) Peek -** Getting your muscles to flex so well and hard that you actually can influence the height of the contraction, such as peaking your biceps.
- **21) Proportion -** How well developed one muscle is in comparison to another, such as biceps to triceps.
- **22) Pump -** Getting the muscles full of blood so they look bigger than ever before.
- **23) Repetition (rep) -** Doing an exercse from starting point to finishing point (full extension to full contraction) one time is one rep A series of reps is a set.
- **24) Rest Pause -** Weider training technique Perform one maximum repetition. Rest for 10-20 seconds and then perform another maximum repetition. Continue until you've done one set of 8-10 reps in this manner.
- **26) Rest Time -** The time of relaxation in between sets of exercises or different exercises themselves.
- **26) Ripped -** The same as cut up Very defined.
- **27) Routine -** The complete program you do for the day Includes all sets exercises and reps Also refers to the planned series of poses bodybuilders do in competition.
- 28) Set A series or grouping of a number of reps.
- **29) Spotter -** Someone to watch you in squats and bench presses in case you can't complete a rep and need assistance.
- **30) Sticking Point -** The place in an exercise movement where gravity and unfavorable external leverage makes the movement the hardest.
- **31) Symmetry -** How well shaped your bone structure and muscle mass are If your lower body is in proportion to your upper body and if your torso length corresponds to your limb length, you have nice symmetry. Refers to the development of your body in planes, upper, lower etc. and how well your muscles look on your frame.
- **32) Training to Failure -** Doing a set of reps until it is impossible to finish one complete rep.
- **33) Vascularity -** How full your veins and capillaries are of blood. How well perfused your muscles are. You need low bodyfat and lots of carbs in your system to look vascular.

These are just a few basic terms used by bodybuilders. By understanding them now, you will find it easier to follow the rest of the course. At the end of this course, I will explain all my principles to you. This will include progressive overload, pyramids, holistic training supersets compound sets flushing and gorging bomb and blitz training, extended sets, forced reps, retrogravity, pre exhaustion, visualization, giant sets, tri-sets, partials, eclectic training, cycle training, split system, double split system, ISO-Tension, priority training, staggered sets, instinctive training and much more!



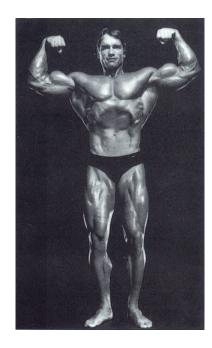






	MUSCLE	COMMON NAME	FUNCTION				
1.	Biceps brachii	Biceps	Flexes the elbow; supinates lower arm; raises arm forward at shoulder				
2	Pectoralis major a. Clavicular b. Sternal	Pecs	Draws arm inward, forward, upward and downward; rotates arm inward				
3.	Sterno-cleido mastoid	Neck	Bends head and neck to side; rotates head and neck; draws neck forward and backward				
4.	Coracobrachialis		Raises arm at shoulder; draws arm inward				
5.	Brachialis		Flexes the forearm toward the upper arm				
6.	Forearm Group a. Brachioradialis b. Extensor Carpi radialis longus c. Extensor Carpi ulnaris d. Pollicis Longus and Brevis	Forearm	Bends the forearm to the upper arm; bends and straightens the wrist; bends and straightens thumb and fingers				
7.	Rectus Abdominis	Abs	Draws the spine forward; compresses the abdomen; depresses the ribs				
8.	Serratus Magnus (Anterior)	Serratus	Rotates the scapula downward; draws the scapulae apart; assists in chest expansion; assists in raising arms overhead				
9.	External Obliques	Obliques	Bends the spine forward and to the side; compresses the abdomen				
	MU	ISCLES OF THE	UPPER BODY — BACK				
1.	Trapezius	Traps	Raises and lowers shoulder girdle; moves shoulder blades; moves head backward and to the side				
2.	Deltoid Group: a. Anterior Head b. Lateral Head c. Posterior Head	Delts	Raises arm to horizontal position; each head lifts arm in particular direction; Anterior (front), Lateral (side), Posterior (rear).				
3.	Triceps	Triceps	Straightens the arm and draws it backward				
4.	Brachialis	Brachialis	Bends the forearm to the upper arm				
5.	Latissimus Dorsi	Lats	Draws the arm downward and backward; depresses the shoulder girdle; assists in forced inhalation; bends the trunk sidewards				
6.	Back Group: a. Infraspinatus b. Teres Major c. Teres Minor d. Rhomboideus	Back	Rotates the arm inward and outward; assists in swinging the arm backward; rotates, raises and draws the shoulder blades together				
	MUS	CLES OF THE L	OWER BODY — THIGHS				
1.	Quadriceps a. Vastus Externus b. Rectus Femoris c. Vastus Internus d. Sartorius	Quads	Straightens the leg Straightens the leg; flexes the hip joint Straightens the leg Bends the leg; flexes the hip joint; rotates the leg inward and outward				
2.	Biceps Femoris a. Semimembranosus b. Semitendinosus	Leg Biceps	Various actions: bends the leg; rotates the thigh inward and outward; extends the thigh				
3.	Gluteus Maximus	Glutes	Extends and laterally rotates the thigh				
	MUS	CLES OF THE L	OWER BODY — CALVES				
1.	Gastrocnemius	Calf	Extends the foot; assists in flexing the knee; assists in locking knee back				
2.	Soleus	Soleus	Extends the foot				
3.	Frontal calf group: a. Tibialis Anterior b. Peroneus Longus	Shin	Extends, flexes and turns over the foot				

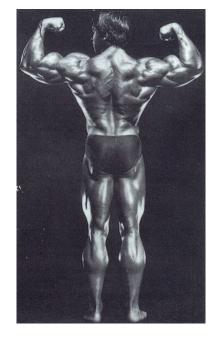
MUSCLES OF THE UPPER BODY — FRONT





	WEIGHT EXERCISE	OTHER ACTIVITIES				
1.	All types of curls; rowing movements	Chins; rope climbing; rowing boats				
2.	Bench presses at all angles; flyes at all angles; dips; pullovers; push-ups; pulley crossovers					
3.	Headstrap exercises; wrestler's bridges; partner- and self- resistance exercises	Wrestling; boxing; football				
4.	Flyes; front raises; bench presses	Throwing; bowling; arm wrestling				
5.	All types of curls; reverse curls; rowing movements	Chins, rope climbing, arm wrestling, weightlifting				
6.	Wrist curls; reverse curls; wrist roller work; Zottman curls; pinch-gripping barbell plates	All sports; strongman stunts using the hands				
7.	All types of sit-ups; leg raises; crunch sit-ups with legs up; Roman chair sit-ups	Gymnastics; pole vaulting; boxing; wrestling; diving; swimming				
8.	Pullovers; standing presses	Weightlifting; throwing; shot putting; boxing; pole vaulting				
9.	Side bends; twisting; twisting sit-ups	Shot putting; javelin throwing; wrestling; football; tennis				
	MUSCLES OF THE UPP	PER BODY — BACK				
1.	Shrugs, power cleans, press behind neck, lateral raises overhead, rowing motions	Weightlifting; wrestling; gymnastics; hand balancing.				
2.	All overhead barbell and dumbbell pressing, bench pressing (front deltoid), dumbbell raises to the side, back and rear, chins (posterior deltoid)	Weightlifting; gymnastics; shot put; boxing; throwing movements				
3.	Triceps extensions, triceps pushdowns, close-grip bench presses, all exercises involving straightening of the arms. Also assists in rowing motions.	Handbalancing; gymnastics; boxing; rowing				
4.	Curls of all types, also reverse curls	Chins; rope climbing, weightlifting; wrestling				
5.	All kinds of chins and lat machine pulldowns, rowing motions, pullovers	Weightlifting; rowing; gymnastics				
6.	Squats, deadlifts, rowing motions, back raises	Weightlifting; wrestling; shot put; rowing; swimming kick; football blocking; dance movements				
_	MUSCLES OF THE LOW	ER BODY — THIGHS				
1.	All forms of squatting, leg presses and leg extensions. (a,b,c)	Hill walking; cycling; weightlifting; track; ballet; football; skating; soccer; powerlifting; sprinting; dancing				
2.	Leg curls, stiff-legged deadlifts, wide-stance hack squats	Wrestling; sprinting; skating; ballet; hurdling; swimming; jumping; weightifting; powerlifting				
3.	Squats, leg presses, deadlifts	Weightlifting; powerlifting; skating; swimming; sprinting; cycling; hill walking; dancing				
_	MUSCLES OF THE LOW	ER BODY — CALVES				
1.	Calf raises, donkey calf raises, leg curls, half or quarter squats	All forms of jumping and running; cycling; ballet				
2.	Calf raises, donkey calf raises	All forms of jumping and running; cycling; ballet				
2.						

MUSCLES OF THE UPPER BODY - FRONT



CHAPTER 7 WARMING UP AND COOLING DOWN

Before beginning your workouts, it's important that you realize how invaluable warming up and cooling down are to your success. In this and the following chapter, I'll explain their importance, outlining exercises and techniques you should use before and after every workout.

In the gym many of my advanced champions do not do any conventional warm-up or stretching movements before their workout. They warm up by doing their first set of each exercise with about half the weight they normally could handle and with a high number of repetitions very slowly and in the groove. However, until you have reached the most advanced stages of training and have mastered the Weider Instinctive Principle, I want you to play it safe and follow my advice.

A set of stretches and limbering exercises will benefit you in the following ways:

WARMING UP (BEFORE EXERCISING)

- 1) Warming up increases blood flow to your joints and helps increase fluidity of movement, which protects against injury.
- 2) Warming up raises the temperature of your blood, which also guards against muscle pulls.
- 3) When blood is pumped into your muscles, they can contract more forcefully and efficiently. This leads to faster growth.
- 4) Warming up allows you to work your muscles through their full range of motion (from full extension to full contraction and back again). This is critical for complete development.

COOLING DOWN (AFTER EXERCISING)

Cooling down is also valuable to a bodybuilder for these reasons:

- 1) Moderate exercise after strenuous weight training gives the heart and circulatory system time to slow down gradually and your metabolism time to return to normal, besides preventing the blood from pooling.
- 2) Stretching after heavy training elongates muscles that have undergone severe contractions during your workout, thus preventing muscle soreness and promoting flexibility.
- 3) You will recuperate more completely by allowing your body temperature to normalize before resuming regular activities.

CHAPTER 8 STRETCHING

As I mentioned in the last chapter, stretching and warm-up type movements are beneficial, and most of my champions use them before working out. Stretching helps to prevent muscle pulls and prepares your muscles to contract harder; stretching also reduces soreness, increases your circulation and helps break up muscle adhesions called spasms. When you stretch here's the way to do it.

- 1) Do a couple of minutes of light jogging or stationary bike riding before stretching. (make sure your muscles are a little warm before stretching them).
- 2) Do not bounce while performing a movement.
- 3) Take 2-3 seconds to move into a stretched position, and hold it for 7-10 seconds. Rest and repeat two more times, being sure to come out of the position slowly as well.
- 4) Don't stretch so hard that it causes pain.

Allow 3-4 weeks before expecting to see increases in your movement ranges. Be patient! Here are a few stretches specially designed for bodybuilders.

- 1) Pectoral-deltoid Stand in front of a doorframe. With your arm outstretched and palms against the doorframe, gradually lean forward, letting your bodyweight exert a pull on to the shoulder-pectoral area. Hold this position for 10 seconds, rest and repeat three times. This will loosen your chest and shoulder muscles
- **2) Low back and hamstring stretch -** Lie on your back and lift your legs back over your head. Carefully move your legs back further, until your feet almost touch the floor Hold for 7-10 seconds, return to starting position and repeat three times.
- **3) Toe touches** Feet together and knees unlocked, bend forward and take hold of your calves, ankles or feet, depending on how far down you can stretch. Pull yourself gently down to a position of full stretch in your hamstrings and lower back muscles. Hold that position, feeling the stretch for 10 seconds. Repeat three times.
- **4) Alternate toe touches** Spread your feet about three feet apart. With your knees unlocked, bend forward and grasp your left knee, ankle or foot with your right hand. Hold this position for 10 seconds, release, then repeat on the other side. Repeat three times on each side, gradually working up to holding the stretched position for 10 seconds each time.
- 5) Side bends With your right hand by your side and your left arm held straight overhead, bend to the right as far as possible, letting your right hand slide down your leg. Hold the bottom position for 10 seconds, release, then come upright. Reverse your arms and repeat the bend to the other side. Do both movements three times each.

WARM-UP / COOL-DOWN EXERCISES

After completing the five stretching movements you can also do the following exercises to increase your circulation to prepare yourself for your workout. The first of these is *jogging in place* or *jumping rope*. You can also do push-ups, sit-ups, and *jumpingjacks*. You should allow no more than 5-10 minutes for this warm-up stage since you should save your energy for your workouts.

HERE'S A GOOD WARM-UP ROUTINE:

- Jumping jacks, 20-30 reps.
- Alternate toe touches 20-30 reps each side.

- Push-ups, 10-15 reps.
- · Side bends, 20-40 reps.

Remember, do these movements one right after the other without pause to get ready for your workouts.

Here are some cool-down exercises for after your workouts:

- Relaxing 5-8 minutes in a whirlpool or sauna.
- Swimming about five minutes.
- · Stationary bicycle about five minutes.
- Slow jogging, gradually slowing to a walk over a 5-10 minute

If your muscles seem unusually tired or sore, massage them with my Deep Relief athletic rub after a warm relaxing shower.

JumpingJacks: Standing erect with your arms hanging loose at your sides, jump up slightly while spreading your feet out to the sides. As you are spreading your feet, lift your arms together over your head so that your hands nearly touch. Without pause bring your arms back down and return your feet to their starting position. Repeat. Note: This is a coordinated movement. As your arms reach their height and your hands almost touch, your feet should be at their widest spread. As your hands come back to the sides your feet should simultaneously come back together.





Alternate Toe Touch: Stand erect with your feet shoulder width apart and your arms hanging loose at your sides. With a slight break at the knee, slowly reach your right hand down and over to your left ankle. Do not bounce or jerk. Then, without pause, come erect and reach your left hand down to your right ankle and without pause come erect again. Repeat to both sides for the required repetitions.

Lie on your stomach, feet flexed and your hands on the floor under your shoulders. Push yourself up with your arms and chest muscles. Lower yourself slowly to close to the floor and repeat. Always keep your elbows directed outwards as you do the movement. Keep your body tight and straight.





Side Bend: Stand erect with your feet a little wider than shoulder width. Place your left hand on your left hip and raise your right hand over your head. Bend to the left side, without bending forward. Let your left arm slide down your left leg for support. Then do the same movement on the right side. Repeat.

CHAPTER 9 GETTING UNDER WAY

here are 15 basic movements in your beginning bodybuilding routine. You will use all or most of these exercises the entire time that you train with weights, so learn them well.

By carefully reading the descriptions of each exercise in this chapter and examining the exercise photos on Chart #1 accompanying this course, you'll be able to learn each movement without additional coaching. Go through the exercises and be sure you're thoroughly familiar with each one *before you* start your first workout.

YOUR FIRST FOUR WORKOUTS

Your first workouts are to be devoted to familiarizing yourself with the actual exercise movements, and getting an idea of your starting strength. I will tell you how to do this now.

Your first workouts will acquaint you with the various exercises in Courses 1, 2 and 3, and they will also give you an idea of what your present strength is, so that you will know what weight you can use in the exercises for the correct number of repetitions.

In studying Charts 1, 2 and 3 you will note that there are pushing, pulling, twisting and bending exercises included. Most of these movements ball use muscles that you have never exercised before. Therefore, you cannot expect to be able to perform the exercises exactly right the first time you try them.

To familiarize yourself with the exercise actions in these first three courses, in your first workout you are to practice *every exercise* in all three charts. Since the entire purpose of this first workout is to teach you the exercise movements, you *must not* use weights that are anywhere close to your maximum strength. You must concentrate upon the correct performance of the movements, so that you can find the correct "groove" of exercise movement, as I mentioned earlier in the course. To do this, you are to go through all the exercises, using the dumbbell and barbell bars *only*. *Do* not even affix the collars to the bars . . . just use the bars by themselves. *Concentrate* on the correct performance of each exercise and the feeling in the muscle affected by the movement. In this first workout, no attempt should be made to follow any set number of repetitions. Just perform 6-8 reps of each movement, so that the exercise action will be firmly fixed in your mind. *This is*

Now that you have learned how to perform the exercises correctly, you can devote your next three workouts to learning how much weight you can use in each exercise.

all you are to do in your first workout!

To do this, in your second workout, you are to follow the 15 exercises shown on Chart No. 1. Refer to the exercise guide in the next chapter, noting the recommended starting poundages for each exercise as well as the recommended number of repetitions.

In each exercise, try to use the amount of weight suggested for it. Now, see how many repetitions you can perform with the proper weight in each exercise. If you find that you can easily perform more than the number indicated as being correct, then you know that your power in this exercise is above average; and the next time you use this same course you are to use a few pounds more in that exercise. Likewise, in the event that you find that you cannot perform the full number of repetitions in any exercise and that the weight is too heavy for you to use, the next time you are to use less weight in that exercise.

If the amount of weight you are using in an exercise feels about right for the correct number of repetitions, then do not make any changes until continued training gives you more strength and the weight feels light. (Keep a diary of the exercises and the amount of weight you can safely start out with; in this way you will not perform the exercises improperly.)

The same procedure is to be followed in your third workout, using Chart No. 2, as well as in your fourth workout, when you make a similar test of starting poundages with Chart No. 3.

The first four workouts do *not* count as a part of your actual training career. As you can see, they are merely break-in periods, in which you familiarize yourself with the movements and learn exactly how much weight you can use in the various exercises for the *correct* number of repetitions. The most important goals of your first workouts are finding the correct amount of weight you can use for the correct number of repetitions in each exercise and going through exercises at a comfortable speed and in the "groove" fashion to learn technique. Once you have accomplished this, you are ready for your first month's training . . . not *before!*

THE FIRST MONTH

If you have followed my advice up to this point, you will have an idea of what weight you can use in the various types of exercises, for the correct number of repetitions. From this point on, you are *never to* train more than three times a week, unless specifically told to do so. You are to use a different one of the three exercise charts each workout, performing only the exercises which appear on each chart. Start with Chart No. 1 for the first workout. Then use Chart No. 2 for the second workout, and finally Chart No. 3 for the third workout. The next week do the same. In this way, your muscles are worked from all angles; they will not get used to working out in a simple fashion. Thus my system will not only develop strength and size but muscle shape too.

For the first month you perform *one set* of each exercise. Review the chapter on general instructions in which I gave detailed information on sets and repetitions, to make sure that you are doing them correctly.

You must not deviate from the exact number of repetitions listed for each exercise. You can, however, continue all through your training course for six months to add more and more weight to those exercises that feel easy, provided that the additional weight

does not prevent you from doing the specified number of reps without straining.

While this regular increase of weight will indicate your normal workout strength, you must also understand that every one of us is more energetic on some days than others.

Therefore, to compensate for these good and bad days it's important that you learn to judge your training energy with your first or second exercise of your workout day. If the weights feel exceptionally light and you have an abundance of energy, then add a few pounds to each of the exercises. If, on the other hand, the weights feel exceptionally heavy the first exercise or so, it's a good idea to go lighter in all the exercises.

You should develop this personal judgment as soon as possible. Every great champion has developed it to a high extent, knowing immediately at the start of each workout whether his strength is higher or lower than usual, and then training accordingly. No one can teach you this. It's something you must develop. But once you have it, you will have taken a great step along the road to physical perfection.

`Athletes must never fall prey to the bodybuilding or powerlifting mentality. They must focus on the task at hand, that of sports excellence. They must not worship muscular size or strength. Weight training is a means to an end, not the end itself, for athletes."

To sum up your training for your first month, remember these points: train three times a week-no more, no less-on alternate days, with one full day's rest between each workout. Use a different exercise chart for each workout day of the week, using the charts in this order: 1, 2 and 3.

Perform the exercises on the chart being used that particular workout exactly in their order of appearance. Do not add or delete exercises! You must perform the exact number of reps, as indicated in the exercise guide in the next chapter. You must perform one set of each exercise only! You must always try to use more weight, but add it gradually, a few pounds at a time with those exercises that feel easy, those you're sure you can perform the correct number of reps even with the added weight. Learn to judge your workout strength, being on the lookout for days when your energy is above normal as well as for when it's lower than usual, using more or less weight accordingly.

If you follow the above carefully, you will have more power and muscle within 30 days than you had at the start of your training, and you will be well started on your road to muscular might. After this first month's training, take a 3-4 day rest. It is important to let yourself heal and rebuild, and to boost your motivation to "get back to it:"

THE SECOND MONTH

While you will be using more weight by the end of your first month than you started with, this is only a fraction of what you will be able to use later on.

Although you should have made good progress your first month, much of it was spent learning the exercises and determining what your exercise power was. Things will come much easier and faster from this point on. You are on your way!

As I have pointed out, this course is a new and improved edition of the Weider System. Only the most modern principles are contained here. One of the most important revisions made is to advise you to perform more than one set of each exercise after your first month of training. This style of training is called the *Set Series*, and up to this time, I felt that more than one set of each exercise would be too severe for the beginner. In the former editions of the Weider System, I did not advise you to go into the set series of training until you had at least three months' experience.

However, my research of the past two years, conducted personally and in the many Weider-Authorized Gyms throughout the world, conclusively proves that when the right programs are followed, the set series of training can be followed after one month's training with added benefits to you.

This point is so important that I do not ask you to take my word for it, but prefer to quote from reports received from various Weider Research Gyms throughout the world, which have kept a careful record of the progress of pupils at my request. For example, from Paris, Pierre Scatalini reports:

"Following your suggestion, I started two groups of pupils at the same time. One group, which I call the 'control' group I held to the one-set method of training for a full three months. The other group, I placed on two sets of each exercise after their first month of training. At the end of three months, the group that went into the two sets of each exercise after one month showed an average bodyweight gain of eight pounds *above* the other group, and were 50 pounds stronger in the bench press and squat. This difference is most amazing, fully proving your theory, the control' group all made fine gains too. However, the group that went into the twoset series of training out-stripped them in every way!"

In my early years, reports from Al Paivio in Montreal, Abe Goldberg in New York City, Allan Stephan in Minneapolis, and Clarence Ross in Alameda supported my recommendations.

Col. Hassan Bafageeh in Saudi Arabia, Franco Fassi in Italy and Rafael Santorja in Spain gave similar reports. All 50 authorized Weider Research Gyms at that time were heard from, and each report was essentially the same: Pupils who go into the set series after one month of training make faster gains than those who remain on only one set of each exercise.

I was spurred on by this, so I wrote back at that time to these same gyms, asking them to immediately place all beginners on two sets of each exercise, wondering if this would prove to be an additional training help. In other words, I asked these gym instructors to place beginners on the set series from their first day of training and to keep a record of the results. "Too much!" was their report. 'A beginner needs this first month of breaking in. He can't stand the set series without it!"

As you can see, in the Weider System nothing is left to chance. I experimented and tried every possibility to give my pupils faster gains. And only those methods that have been

conclusively proven under every possible circumstance become part of the Weider System. I hope that you appreciate this. All I ask of you in return is that you place your confidence in me. If you do you, too, can rise to the very top, as another Weider champion. Since the set series of training has been tested and proven as being the best for you to follow in your second month of training, you are naturally instructed to do so in this course.

Therefore, in the second month of your training, you will train in this manner. You will still train three times a week. You will still follow one exercise chart at a time. You will still perform the exact number of repetitions indicated for each exercise. And you will try to use more weight in each exercise. However, instead of performing one set of each exercise as you did the first month you will now perform two.

Start your workout with the first exercise that appears on the particular chart you are using on this workout day. As always, use a weight that permits you to perform the correct number of repetitions. After you have done this, put the weight down and take a rest of about a minute. Then take this *same weight* and perform the *same* exercise once again, trying for the *same* number of repetitions. This second set will probably feel more difficult than the first, but if you make a determined effort you will be able to complete it properly.

After you have finished the second set of exercise, again take a minute or two to rest and proceed to Exercise No. 2, performing two sets, as explained above. Every exercise on the chart being used for this workout is done in this same manner. This is called the set series of training.

If the second set proves too hard, do fewer reps. Add reps progressively until you reach the correct number. Your progress will not be held back if you make an all-out effort to gradually work up to the required reps.

Naturally, in your second and third workouts for that week, you apply this same training principle to each of the charts you use for the specific workouts. Continue in this manner for all of the second month.

This set series of training literally forces muscles to grow. Blood is pumped into the muscles and they become flushed. If a balanced diet as outlined later in my course is followed, muscles grow fast, bulking up with size and power.

THE THIRD MONTH

The aim of most beginners in bodybuilding is to gain as much weight as possible, just as fast as possible. You are tired of being ridiculed because of your weak, skinny body.

Of course there are some overweight beginners who want to melt off fat just as quickly as they can because they're tired of being flabby and formless.

Oddly enough, both the underweight and the overweight beginners find that their bodyweight problems are corrected dur ing the first few months of training. The reason is, of course, that the same muscular activity which builds muscle on the underweight also melts off fat while it's building muscle on the overweight. This

correction is a *fast one* if each person follows a diet suitable for his condition and supports this diet with the proper food supplements.

Champion bodybuilders need more than just normal bodyweight and muscular size. They must have finely chiseled proportions, hard muscular delineation and clean-cut separation.

To keep the muscles growing at a fast pace, while protecting the bodybuilder against bulky, heavy lines (which may come from too many calories, very heavy weight and too few exercises), a change must be made in the training followed during your third month.

You are to continue performing two sets of each exercise, just as you did in the second month. However, you make a change in your number of repetitions. Now you disregard the repetitions method. In *every* exercise for the first set you use as heavy a weight as you can handle for *five* reps for one set. Then, after a short rest, reduce this weight sufficiently to permit you to *perform a second set of nine* repetitions. Do these final nine reps with a real controlled exercise rhythm, in the "groove" fashion, a little more quickly than the first five.

It's impossible for me to tell you exactly how much weight you will have to use in the first set and how much you will have to reduce for that second set. In some exercises, you may have to reduce only a few pounds. In other instances, you may have to reduce the weight as much as 25%. Only a test will tell you exactly how much.

This low and high repetition principle helps you to achieve the following: 1) the low repetitions build power and muscle size; 2) the higher repetitions build shape and muscularity; 3) because you will find the lighter weight used in the higher repetitions easy to handle, you will be able to perform them with better rhythm. Higher reps build different parts of the muscle, contributing to increased size, shape and endurance.

Besides these three main features, this low and high repetition principle keeps you and your body from getting into an exercise rut, maintaining exercise enthusiasm and eliminating any possibility of exercise boredom. You also gain more endurance and improved energy along with greater power and faster growth from this method of training, which will help you in any sport you enter in the future. This is another Weider exclusive training principle (my holistic training method) fully tested and proven. It is the method used by the greatest champions who have huge measurements, still retaining the hard definition so important to impressive physical perfection.

"Rugged workouts cause unusual chemical changes, as your muscles grow. Your muscles will grow better when you supply themwith the right food at the right time and in proper balance."

"Each rep must begin smoothly and proceed to completion, which should take about three seconds; and you should pause for one second to ensure proper contraction; and lower under control to the starting position, which should take about four seconds."

Of course you are to continue at all times to try to handle more and more weight. I have repeated this often in this course. You are also to try to work up a real training drive, a strong determination, and you must maintain a confident attitude, at all times, that complete physical success will be yours.

During this third month of training, you are to continue to work out three times a week, using only one exercise chart at a time, as before. You will see many remarkable changes taking place in your strength and appearance during this month. You will no ionger be a beginner. You will know that as a Weider pupil you are indeed following the best in bodybuilding. You will realize then that your confidence in me has been well placed, that my methods are the most scientific, up to date and resultproducing in the world. You will know that the Weider System and its techniques have built almost every champion bodybuilder in the world. If you have faithfully followed my advice, at the end of your third month of training, you will possess the foundation of championship form that, with continued Weider Training, you can develop to unbelievable levels of strength and power.

EXERCISE GUIDE

This is the exercise guide referred to in the previous chapter. It applies only to your first three months of training and should be used with Charts 1, 2 and 3. The last chapter explained this thoroughly.

The first column of this guide lists the exercises by number, in the order they appear on the illustrated exercise charts. The next column gives you the name of each exercise. Then, the recommended starting poundages are shown for each exercise. Following this is the number of sets and reps each exercise is to be performed the first, second and third months.

You will note that the first month you are to perform all exercises one set, eight repetitions. The second month, you perform two sets, each one eight repetitions, using the same weight for each set. This is shown as 88 under the heading of "reps." The third month you again perform two sets, the first five reps with as much weight as you can use correctly, and then after a short rest you perform another set with a lighter weight and nine repetitions. This is shown as 5-9 under the heading of "reps" for the third month.

After you have followed Charts 1, 2 and 3 for three months as explained, you are then to discontinue using these routines and progress into the next course as outlined in the following chapter. NOTE: In standing exercises, assume a comfortable foot position, feet placed about 14 inches apart.

"No matter whether your goal is to lose dangerous, ugly fat or to gain robust, healthy muscle, my methods of training and diet will do the job for you."

CHART 1

Exercise Number	Exercise Name	Recommended Starting Poundage	First Sets	Month Reps	Seco Sets	nd Month Reps	Thir Sets	rd Month
1	Bench Presses	35 lbs	1	8	2	8-8	2	5-9
2	Flyes	10	1	8	2	8-8	2	5-9
3	Lateral Raises	3	1	8	2	8-8	2	5-9
4	Presses Behind Neck	20	1	8	2	8–8	2	5–9
5	Squats	35	1	8	2	8-8	2	5-9
6	Leg Extensions with Boot	15	1	8	2	8–8	2	5-9
7	Leg Curls with Boot	5	1	8	2	8–8	2	5-9
8	Neck Exercise All Directions	0	1	8	2	8-8	2	5-9
9	Barbell Rows	25	1	8	2	8-8	2	°5-9
10	Curls	20	1	8	2	8-8	2	5-9
11	Triceps Extensions	20	1	8	2	8–8	2	5-9
12	Incline Curls	10	1	8	2	8-8	2	5-9
13	Sit-Ups	0	1	12	2	15-15	2	25-25
14	Leg Raises	0	1	12	2	15-15	2	25-25
15	Calf Raises	35	1	8	2	8-8	2	5-9

CHART 2

Exercise Number	Exercise Name	Recommended Starting Poundage	First Sets	Month Reps	Secon Sets	nd Month Reps	Thi Sets	ird Month Reps
1	Power Cleans	20 lbs	1	8	2	8-8	2	5-9
2	One-Arm Rows	10	-1	8	2	8-8	2	5-9
3	Bent-Arm Pullovers	10	1	8	2	8-8	2	5–9
4	Military Presses	20	1	8	2	8-8	2	5-9
5	Upright Rows	10	1	8	2	8-8	2	5-9
6	Bent-Over Lateral Raises	5	1	8	2	8–8	2	5-9
7	Concentration Curls	5	1	8	2	8–8	2	5-9
8	Triceps Kickbacks	5	1	8	2	8-8	2	5–9
9	Wrist Curls	20	1	8	2	8-8	2	5-9
10	Crunches	0	1	12	2	15-15	2	25-25
11	Calf Raises	35	1	8	2	8-8	2	5-9
12	Lunges	15	1	8	2	8-8	2	5-9



CHART 3

Exercise Number	Exercise Name	Recommended Starting Poundage	First Sets	Month Reps	Seco Sets	nd Month Reps	Th Set	ird Month s Reps
1	Squats	35 lbs	1	8	2	8-8	2	5-9
2	Leg Extensions	20	1	8	2	8-8	2	5-9
3	Leg Curls	-10	1	8	2	8-8	2	5-9
4	Deadlifts	50	1	8	2	8-8	2	5-9
5	Bent-Over Rows	25	1	8	2	8-8	2	5-9
6	Incline Presses	25	1	8	2	8-8	2	5-9
7	Close-Grip Bench Presses	20	1	8	2	8–8	2	5-9
8	Behind-the- Neck Presses	20	1	8	2	8-8	2	5-9
9	Forward Raise with Dumbbells or Barbell	10	1	8	2	8–8	2	5-9
10	Dumbbell Triceps Extensions	5	1	8	2	8-8	2	5-9
11	Seated Alternate Dumbbell Curls	10	1	8	2	8-8	2	5-9
12	Reverse Curls	15	1	8	2	8-8	2	5-9
13	Bent-Over Lateral Raises	5	1	8	2	8–8	2	5-9
14	Walking Calf Raises	25	1	8	2	8–8	2	5-9
15	Crunches	0	1	12	2	15-15	2	25-25
16	Leg Raises	0	1	12	2	15-15	2	25-25

CHAPTER 10 EXERCISE AND TRAINING TIPS

CHART 1-INSTRUCTIONS

1) Bench Presses

- A. Emphasis. Bench presses stress the pectorals, deltoids and triceps. Most champion bodybuilders consider the bench press one of the best upper-body exercises.
- B. Starting Position. Lying on your back on a flat exercise bench, take a slightly wider than shoulder-width grip on a barbell, palms facing upward. Your arms should be straight and the barbell supported directly above your chest.

C. The Movement. Making sure that your upper arms travel directly out to the sides, slowly bend your arms and lower the barbell straight downward until it touches the middle of your chest at just about your nipple line. Push back up to the starting position and repeat the movement for the suggested number of repetitions. D. Training Tip. Be sure not to arch your back or hold your breath. This takes stress off the muscles being worked and can be dangerous.

2) Flyes

- A. Emphasis. This movement builds pectorals and deltoids. B. Starting Position. Lie on your back on a flat bench, holding one dumbbell in each hand, pressed up to arm's length above your chest.
- C. The Movement. Lower the dumbbells horizontally, keeping your elbows just slightly bent, and bring the dumbbells out and away, down far enough until you feel a good stretch in your chest area. Your upper arms should go considerably below the line of your body.
- D. Training Tip. If you straighten your arms all the way, this movement is more difficult and does not work the chest as hard. Be sure to take a very deep breath when lowering the dumbbells and exhale as you raise them back through the same arc to the top position.

3) Lateral Raises

- A. Emphasis. This exercise works the outside or lateral head of your deltoid muscles.
- B. Starting Position. Stand erect, holding one dumbbell in each hand, elbows bent.
- C. The Movement. Raise the dumbbells simultaneously away from the sides of your body until they are level with the top of your head. Lower slowly and repeat.
- D. Training Tip. If you always keep your elbows and wrists slightly bent, you will get a much better action on the lateral head of your deltoids. As you raise the dumbbells, rotate your hands so your little finger is higher than the thumb at the top of the movement. Reverse this as you lower the dumbbells.

4) Behind-the-Neck Presses

- A. Emphasis. This movement works the big muscles of the upper torso, namely your deltoids, trapezius, upper chest, triceps and some upperback muscles.
- B. Starting Position. Start with the bar behind your head, resting across your upper back and base of neck.
- C. The Movement. Keeping a wider than shoulder-width grip, press the bar up over your head to arms' length. Return slowly to your neck base and repeat.
- D. Training Tip. If you change the width of your grip periodically, you will stress different muscles. Very wide grips work your deltoids to their max. Narrower grips place a lot of stress on your triceps muscles.

5) Squats

A. Emphasis. This movement is one of the best exercises you can do, because it affects most of the major muscle groups of the body. The squat works the thigh muscles, hips and buttocks, hamstrings and lower back. The abdominal muscles, upper back, calves and shoulders are stimulated too.

- B. Starting Position. Stand erect with a barbell behind yourneck, balancing it across your shoulders by grasping the bar knurls near the plates. Place your heels about 15-20 inches apart, toes angled slightly outward.
- C. The Movement. Fix your eyes on a point in front of you slightly above eye level and keep them there throughout the movement. Then slowly bend your knees and lower your body into a full squat. Be sure to keep your torso upright, your back flat and head up (keeping your vision fixed on a point helps this) during the whole movement. Once your thighs have gone past parallel, then slowly raise up to the starting position. Always try to keep your feet flat.
- D. Training Tip. If you lack ankle flexibility, you'll find it difficult to balance yourself while squatting. You can make your balance more secure by resting your heels on a 2x4-inch board during the movement.

6) Iron Boot Leg Extensions

- A. Emphasis. This movement develops the quadriceps of the thigh.
- B. Starting Position. Sitting on a high bench with your lower legs hanging, wearing the iron boots.
- C. The Movement. Keeping your upper leg stable, straighten out your lower legs, either together or one at a time. Bring your lower leg all the way up so that it's straight, lower and repeat. D. Training Tip. Since the weighted boot puts a traction force on your knee, do not sit in this position while resting. Move back on the bench so that your leg is supported.

7) Iron Boot Leg Curls While Standing

- A. Emphasis. This exercise builds the hamstring muscles.
- B. Starting Position. Leaning against the wall with the boot on. Lean at such an angle that you can bend your knee and do a full leg curl.
- C. The Movement. Standing with your body anchored, keep your knee fixed and curl your heel up to your butt, using your hamstring muscles only. Alternate legs for the required number of reps.
- D. Training Tip. Some of my champions have found that they respond better to higher repetitions in this movement.

8) Neck Exercises (all directions)

A. Emphasis. You will be building up all your neck muscles, those on the front, back and sides of your neck. You will also condition your shoulder girdle elevators.

- B. Starting Position. Sitting in an upright position with your hands, palms in, against your forehead. Bend your head back as far as you can.
- C. The Movement. Using your hands to supply resistance against the front of your forehead, bend or flex your head as far forward as possible. Go backward through the full range of motion and repeat for the required repetitions. Now move your head all the way to your left. Place the right hand up to the side of your head and bend all the way over to the right against the resistance of your arm and hand power. Now bend your head to your right shoulder and, using your left hand against the side of your head, flex your head all the way to the right. You have now exercised your neck in flexion and side flexion. Now bend your head all the way forward and place your hands behind your head. Extend your head back through the full range of motion against the resistance supplied by your arms and hands. Repeat for the required repetitions.
- D. Training Tip. Both before and after neck exercising, roll your head around in a relaxed manner through all its available ranges of motion. This will warm you up before exercise and relax you after exercise. As you become more advanced in neck work, you can use a towel instead of your hands to provide resistance. Using a towel is very effective for forward flexion and reverse extension, but not in sideways flexion.

9) Upright Rows

- A. Emphasis. Upright rows stress the deltoids and trapezius muscles. Secondary emphasis is placed on the biceps and forearms.
- B. Starting Position. Stand erect with a narrow grip (your index fingers should be about six inches apart on the bar) in the middle of a barbell and your palms toward your body. The barbell should be resting across your upper thighs and your arms straight at the beginning of the movement.
- C. The Movement. Slowly pull the barbell upward along a line close to your body, pulling your elbows upward and keeping them above the level of your hands at all times. When the bar is at your neck level, pause and lower it slowly along the same arc until it again rests across your upper thighs. Repeat for the required number of reps.
- D. Training Tip. Be sure to lower the barbell slowly on each repetition. On upright rows you can receive as much benefit from slowly lowering the bar as from raising it.

10) Cheat Curls

- A. Emphasis. This movement stresses the biceps and places secondary stress on the forearms.
- B. Starting Position. Stand erect with a shoulder-width grip on a barbell, palms facing away from your body. Your upper arms should be pinned to the sides of your torso throughout the movement. At the start of the movement, your arms should be straight and the barbell should be resting across your upper thighs.

- C. The Movement. Moving just your forearms, bend your arms and move the barbell in a semicircle from your thighs to your chin. Slowly lower the weight along the same arc back to the starting point and repeat.
- D. Training Tip. Be sure to keep your upper body motionless as you curl the weight. Moving your torso and bending your back to get the barbell up will rob the movement of much of its effectiveness. Be sure to lower the bar fully (arms hanging straight down) after having curled it to the top of the movement. Perform a full motion each rep.

11) Lying Triceps Extensions

- A. Emphasis. This movement places stress on the triceps.
- B. Starting Position. Take the same starting position as for the bench press, except that you should use a narrow grip (six inches between your index fingers) in the middle of the barbell.
- C. The Movement. Keeping your upper arms motionless, bend your elbows and move the barbell in a semicircular arc until it touches your forehead or goes back over your head off the end of the bench. Return the barbell along the same arc to the starting position and repeat for the required number of repetitions. D. Training Tip. This movement can also be done while standing erect, sitting on a flat exercise bench, lying on an incline bench or lying on a decline bench.

12) Incline Curls with Dumbbells

- A. Emphasis. These work your upper-arm muscles, particularly your biceps and brachialis.
- B. Starting Position. Lying on the bench on your back holding two dumbbells.
- C. The Movement. Keeping your body against the bench, slowly curl the dumbbells from the down position up to your shoulders and then repeat.
- D. Training Tip. If you move your hands from a fully pronated position (palms down with thumbs in) to a fully supinated position (palms up with thumbs out) at the top of your curl, you will get a supercontraction.

"Overtraining is the most common cause of injuries and failure."

13) Crunches

- A. Emphasis. This exercise works your upper abdominals.
- B. Starting Position. Lie supine with your legs up on a bench. Your arms can be folded across your chest or your hands clasped behind your head.
- C. The Movement. Slowly curl your shoulders toward your knees until your shoulder blades get 1-2 inches off the floor. Hold for a second, go back to the starting position and repeat. D. Training Tip. To get an even better contraction while you are doing your crunch, try to push your lower back into the floor.

14) Leg Raises

- A. Emphasis. This movement works the muscles of the lower abdomen and the upper hip-thigh flexor muscles.
- B. Starting Position. Lie flat on your back on the floor with your lower back firmly against the floor
- C. The Movement. Stabilizing your body and keeping your lower back flat on the floor, with a slight bend in knees, lift your legs straight up until they are perpendicular to your torso, then lower back until the legs graze the floor and repeat.
- D. Training Tip. To keep tension on the lower abs, make sure your back stays flat against the floor at all times. If you relax and arch your lower back, this movement puts too much stress on your lower back and loses its effectiveness as a lower abdominal builder. To intensify this exercise use an incline bench as shown in illustration.

15) Standing Calf Raises

- A. Emphasis. This movement stresses the gastrocnemius and soleus muscles of your calves.
- B. Starting Position. Place a barbell behind your neck, balancing it as you do when performing a squat. Stand with your toes and the balls of your feet on a 4x4-inch or 2x4-inch block of wood. Your feet should be about 8-10 inches apart, (toes pointed directly ahead. The lower you can get the heels, the better) C. The Movement. Keeping your legs straight, rise up as high as possible on your toes. Lower slowly back to the starting point and repeat. You can also do this while holding a dumbbell in your hand.
- D. Training Tip. You might find it difficult to balance yourself, but if you rise up slowly you should be able to manage. Large gyms have a special calf machine that eliminates the balance problem. On your second set of calf raises, point your toes outward at 45-degree angles. On your third set, point them inward at 45-degree angles. Each foot position stresses the calves somewhat differently.

CHART 2-INSTRUCTIONS

1) Power Cleans

- A. Emphasis. This movement works the muscles of the upper, middle and lower back, arm flexors, trapezius, neck and thighs. A great allround exercise.
- B. Starting Position. The bar should be in front of your shins. You should be bent down with your back flat, head up, eyes straight ahead and with a palms-away-from-the-body grip on the bar.
- C. The Movement. Keeping your back flat and using a shoulderwidth grip, pull the bar to your shoulders in one movement. Keep the bar close to your body and concentrate on accelerating the speed with which you pull the bar at all times.
- D. Training Tip. Think of your arms as mere hooks transmitting power to the bar. Your legs and back do all the work!

2) One-Arm Rows

- A. Emphasis. This exercise works the upper-back muscles, especially the lats, and your arm flexors, especially the biceps. B. Starting Position. Bend forward, keeping one arm and knee stabilized on a bench. Reach down with the other arm and grasp a dumbbell lying on the floor.
- C. The Movement. Pull the dumbbell up to your shoulder or higher, using your back muscles. Lower slowly, getting a good stretch and repeat.
- D. Training Tip. Remember to do this with both arms and twist your body a little as you pull the dumbbell to the top so that you can pull it through a greater range of motion for greater development.

3) Bent-Arm Barbell Pullovers

- A. Emphasis. This exercise builds your chest, triceps, serratus and upper-back muscles, especially the latissimus dorsi.
- B. Starting Position. Lie on your back on a bench with your head hanging off the end, with the barbell on the floor just behind your head.
- C. The Movement. Reach back and grasp the bar with a slightly narrower than shoulder-width grip, pull the bar over your head with your elbows bent. Return and repeat.
- D. Training Tip. You can use a lot of weight with bent-arm pullovers, as compared to straight-arm pullovers, so you can build more power and size with this movement.

4) Military Presses

- A. Emphasis. This exercise stresses the deltoids and triceps, with secondary emphasis on the upper pectorals, trapezius and back.
- B. Starting Position. Take a shoulder-width grip on a barbell, palms facing away, with the bar resting across the front of your shoulders.
- C. The Movement. Push the barbell directly up past your face until your arms are locked out straight and the barbell is directly above your head. Slowly lower the barbell back to the starting position and repeat the movement for the required number of repetitions.
- D. Training Tip. Be careful not to bend backward as you press the weight upward. This will make the movement easier to complete, but will rob your shoulders of part of the stress they should be receiving. Never hold your breath! Always wear a weightlifting belt too.

5) Upright Rows

- A. Emphasis. Upright rows stress the deltoids and trapezius muscles. Secondary emphasis is placed on the biceps and forearms.
- B. Starting Position. Stand erect with a narrow grip (your index fingers should be about six inches apart on the bar) in the middle of a barbell and your palms toward your body. The barbell should

- be resting across your upper thighs and your arms straight at the beginning of the movement.
- C. The Movement. Slowly pull the barbell upward along a line close to your body, pulling your elbows upward and keeping them above the level of your hands at all times. When the bar is at your neck level, pause and lower it slowly along the same arc until it again rests across your upper thighs. Repeat for the required number of reps.
- D. Training Tip. Be sure to lower the barbell slowly on each repetition. On upright rows you can receive as much benefit from slowly lowering the bar as from raising it.

6) Bent-Over Lateral Raises With Dumbbells

- A. Emphasis. This movement develops the posterior deltoids and upperback muscles.
- B. Starting Position. As in the lateral raise, grasp one dumbbell in each hand. Lean over until your body is bent at a 90degree angle. Bend your knees slightly to take the strain off your back.
- C. The Movement. Raise the dumbbells together out laterally to the sides. After reaching the high point of the movement, lower the dumbbells and repeat.
- D. Training Tip. If you bend your elbows and wrists slightly, you will get a much better pump and contraction in the back deltoid muscles. Keep the mind-muscle link focused on the exercised muscles throughout the movement.

7) Concentration Curls

- A. Emphasis. This movement works your upper arms, especially your biceps.
- B. Starting Position. Seated, or bent forward from the waist with your arm braced against the inside of your thigh.
- C. The Movement. Slowly curl your lower arm up toward your chest, but keep your upper arm stationary, tucked in against your inner thigh.
- D. Training Tip. Do not flex your wrist when you lift the weight because this will enlist the aid of your forearm muscles, making

it easier to lift. Feel the movement throughout the entire range. Hold and squeeze the contraction as hard as possible for a full three seconds, then lower slowly.

8) Triceps Kickbacks

- A. Emphasis. This movement builds the triceps muscles almost exclusively.
- B. Starting Position. Leaning over with one hand stabilizing the body on the end of a bench and the other hand holding a dumbbell.
- C. The Movement. Keeping your elbow high but fixed, straighten out the forearm and kick the dumbbell back and slightly upwards. You do this with the forearm only.
- D. Training Tip. Use the Weider ISO-Tension Principle and contract your triceps very hard at the end of the movement for a

count of three before lowering back down for maximum development.

9) Wrist Curls-Palms Up

- A. Emphasis. This exercise strongly stimulates the muscles of your forearms.
- B. Starting Position. Sit at the end of a flat exercise bench with your forearms resting on your thighs so your wrists are hanging over your knees. Take a grip on a barbell with your palms up and your inside fingers 8,10 inches apart. Alternatively, you can take a grip of the same width with your palms down.
- C. The Movement. Flex your wrists, curling the barbell upward as high as you can. Return to the starting position and repeat. D. Training Tip. Doing wrist curls with palms up stresses the flexor muscles on the insides of the forearms. Doing them with palms down stresses the extensor muscles on the outsides of the forearms.

10) Crunches

- A. Emphasis. This exercise works your upper abdominals.
- B. Starting Position. Lie supine with your legs up on a bench. Your arms can be folded across your chest or your hands clasped behind your head.
- C. The Movement. Slowly curl your shoulders toward your knees until your shoulder blades get 1-2 inches off the floor. Hold for a second, go back to the starting position and repeat. D. Training Tip. To get an even better contraction while you are doing your crunch, try to push your lower back into the floor.

"In the highly complex world of top-level sports, science reigns supreme. Science, that is, that's tempered with a sound basis of practical understanding and wisdom. My systems of training carefully combine the theoretical world of science with the practicalities of the barbell and dumbbell. Without the expertise to use it, science is wasted!"

11) Standing Calf Raises

- A. Emphasis. This movement stresses the gastrocnemius and soleus muscles of your calves.
- B. Starting Position. Place a barbell behind your neck, balancing it as you do when performing a squat. Stand with your toes and the balls of your feet on a 4x4-inch or 2x4-inch block of wood. Your feet should be about 8-10 inches apart (toes pointed directly ahead the lower the heels, the better).
- C. The Movement. Keeping your legs straight, rise up as high as possible on your toes. Lower slowly back to the starting point and repeat. You can also do this while holding a dumbbell in your hand.
- D. Training Tip. You might find it difficult to balance yourself, but if you rise up slowly you should be able to manage. Large gyms have a special calf machine that eliminates the balance problem.

On your second set of calf raises, point your toes outward at 45-degree angles. On your third set, point them inward at 45-degree angles. Each foot position stresses the calves somewhat differently.

12) Lunges

- A. Emphasis. This movement stresses your upper hamstrings, butt muscles and quadriceps.
- B. Starting Position. Stand erect with the barbell across your shoulders. Take a long step forward and sink slowly into a squat with that leg extended.
- C. The Movement. When you have lowered into that extended position, use your leg to bring yourself erect again. Then step out with the other foot and repeat.
- D. Training Tip. If you only push yourself up three quarters of the way or just short of full extension, you will keep constant tension on your quadriceps.

"Bodybuilding will give you not only a fantastically strong athletic body, but also a sense of mastery, patience to learn, capacity for change, ability to cope with problems, relief from depression, and the power to create a new positive self-image."

CHART 3-INSTRUCTIONS

1) Squats

- A. Emphasis. This movement is one of the best exercises you can do, because it affects most of the major muscle groups of the body. The squat works the thigh muscles, hips and buttocks, hamstrings and lower back. The abdominal muscles, upper back, calves and shoulders are stimulated too.
- B. Starting Position. Stand erect with a barbell behind your neck, balancing it across your shoulders by grasping the bar knurls near the plates. Place your heels about 15-20 inches apart, toes angled slightly outward.
- C. The Movement. Fix your eyes on a point in front of you slightly above eye level and keep them there throughout the movement. Then slowly bend your knees and lower your body into a full squat. Be sure to keep your torso upright, your back flat and head up (keeping your vision fixed on a point helps this) during the whole movement. Once your thighs have gone past parallel, then slowly raise up to the starting position. Always try to keep your feet flat. D. Training Tip. If you lack ankle flexibility, you'll find it difficult to balance yourself while squatting. You can make your balance more secure by resting your heels on a 2x4-inch board during the movement.

2) Leg Extensions

A. Emphasis. This is the best isolation movement for stressing the quadriceps.

- B. Starting Position. Sit on the bench with the backs of your knees against the edge toward the lever arm. Hook your insteps under the roller pads and grasp the sides of the bench with your hands to steady your torso in an upright position.
- C. The Movement. Use the quad strength to slowly straighten your legs. Hold this peak contracted position for a slow count of two, then lower back to the starting point. Repeat the movement for the desired number of repetitions.
- D. Training Tip. You can also do machine leg extensions with one leg at a time. Normally, the movement is done with toes pointed straight ahead, but you can angle your toes slightly inward or outward as well.

3) Leg Curls

- A. Emphasis. This is the best isolation movement for stressing the biceps femoris (hamstrings) muscles.
- B. Starting Position. Lie face-down on the table with your knees at the edge of the pad toward the lever arm. Hook your heels under the roller pads and straighten your arms fully. Grasp the sides of the bench and keep your hips on the padded surface throughout the set
- C. The Movement. Use leg biceps strength to flex your legs as fully as possible. Hold this peak contracted position for a slow count of two, then lower slowly back to the starting point. Repeat the movement for the suggested number of repetitions.
- D. Training Tips. You can also do machine leg curls with one leg at a time. Normally, the movement is done with toes pointed straight downward, but you can angle your toes slightly inward or outward as well.

4) Deadlifts

- A. Emphasis. This exercise builds your lower back, hip, middle back, thigh and trapezius muscles. Also strengthens your grip. B. Starting Position. Stand with your shins just grazing the barbell. Bend down naturally and grasp the bar with one hand forward and one hand reversed (to increase your grip power). Stand erect naturally using the power of your legs and back in conjunction. Keep the bar close to your body at all times as you start the lift.
- C. The Movement. Lift the weight from the floor, keeping your arms straight and your back as flat as you can. Bring the bar up keeping it close to your body and lower it back slowly once you have reached the top position, which is the bar against your upper thigh, arms extended. Repeat the exercise for the required number of reps.
- D. Training Tip. Once you have mastered this exercise, you can do deadlifts occasionally, with your knees straight. These are called stiff-leg deadlifts and work your lower back very hard. However, this is an advanced exercise and you cannot use as much weight.

5) Barbell Bent Rows

- A. Emphasis. This movement stresses the large latissimus muscles of your upper back, with secondary emphasis on the trapezius, rhomboids, erector spinae, posterior deltoids, biceps and forearms.
- B. Starting Position. Feet about shoulder-width apart, bend over until your torso is parallel to the floor. Unlock your knees slightly to remove undue stress on your lower back. Grasp a barbell with a shoulder-width grip, your palms facing your shins. Your arms should be hanging straight down from your shoulders at the start of the movement.
- C. The Movement. Making sure that your upper arms travel out to the sides, pull the barbell directly upward until it touches your upper stomach. Lower back to the starting position and repeat for the suggested number of repetitions.
- D. Training Tip. On most barbell exercises, and particularly on the bent rowing movement, you should periodically vary the width of your grip. This will put different degrees of stress on the muscles. The greater the number of grips, the greater the overall development. Also, be sure to stay focused on the feeling in your back muscles as they're working. Remember, you're not lifting weights, per se, you're using weights to stimulate your muscles.

"For best results, every set you do your muscles must contract as fully and hard as possible - but only for a short duration."

6) Incline Presses

- A. Emphasis. This exercise stresses the upper chest muscles, anterior or front deltoid muscles, and your triceps muscles.
- B. Starting Position. Lying on an incline bench on your back with the bench set at a 35-45 degree angle.
- C. The Movement. Take the bar off the racks using a grip a bit wider than your shoulders. Inhale and lower to the high point of your chest. Without pause, press the weight back up while exhaling
- D. Training Tip. By using a wider grip and lowering the bar to your clavicles, you'll get a better pump in your chest.

7) Close-Grip Bench Press

- A. Emphasis. This exercise places primary stress on the pectorals (particularly the inner section), anterior deltoids and triceps.
- B. Starting Position. Take a narrow over-grip in the middle of a moderately weighted barbell (there should be 4-6 inches of space between your index fingers). Lie on your back on a flat exercise bench with your feet flat on the floor to balance your body, and extend your arms straight upward from your shoulders. C. The Movement. Bend your arms and slowly lower the barbell downward until it touches your chest. Push it slowly back to the starting point and repeat the movement for the suggested number of repetitions.
- D. Training Tip. The wider the grip in this exercise, the more stress moves from the inner to outer pectorals.

8) Behind-the-Neck Presses

- A. Emphasis. This movement works the big muscles of the upper torso, namely your deltoids, trapezius, upper chest, triceps and some upper-back muscles.
- B. Starting Position. Start with the bar behind your head, resting across your upper back and base of neck.
- C. The Movement. Keeping a wider than shoulder-width grip, press the bar up over your head to arms' length. Return slowly to your neck base and repeat.
- D. Training Tip. If you change the width of your grip periodically, you will stress different muscles. Very wide grips work your deltoids to their max. Narrower grips place a lot of stress on your triceps muscles.

9) Forward Raises With Dumbbells or Barbell

- A. Emphasis. This exercise works the muscles of the upper chest and front or anterior deltoid.
- B. Starting Position. Stand erect, holding one dumbbell in each hand or a straight bar at arms' length across the middle of your thighs.
- C. The Movement. Raise the dumbbells either one at a time or simultaneously with your elbows slightly bent until they are eye level. Lower slowly and repeat. You can do the same thing with the bar.
- D. Training Tip. If you use the dumbbells, try holding them with your thumbs up and raising them in this manner. This will isolate the front deltoid even more.

10) Dumbbell Triceps Extensions

- A. Emphasis. This movement places direct stress on the triceps muscles of the upper arm.
- B. Starting Position. Grasp a light dumbbell in your left hand and sit at the end of a flat exercise bench. Place your right hand on your hip and extend your left arm straight upward from your shoulder, your palm facing forward throughout the movement. C. The Movement. Keeping your upper arm motionless, allow the dumbbell to travel backward and downward in a semicircular arc to as low a position as possible. Use triceps strength to move it back along the same arc to the starting position. Repeat. Be sure that you do an equal number of sets and reps for each arm. D. Training Tip. You can also move the weight diagonally across your body rather than directly to the rear.

11) Seated Alternate Dumbbell Curls

- A. Emphasis. This exercise works all the arm flexor muscles, especially the biceps.
- B. Starting Position. Seated on the end of a bench or as shown in photo, holding one dumbbell in each hand.
- C. The Movement. Curl one dumbbell in a strict manner up to your shoulder. Then, as you lower that dumbbell slowly, curl the other dumbbell, alternating the movements.

D. Training Tip. Some champions like to start this movement with their palms down, turning their palms up as they go through the motion to better activate their biceps.

12) Reverse Curls

- A. Emphasis. This exercise works the large muscles at the top of your forearms, particularly the brachioradialis.
- B. Starting Position. Standing, holding onto a barbell with your arms down and arms extended in front of your thighs, the bar across your thighs.
- C. The Movement. Keeping your elbows as fixed as possible, curl the weight up to your shoulders slowly and evenly. Lower and repeat.
- D. Training Tip. Avoid extending your wrists when curling and avoid using body heave to make the lift. Both techniques make the movement less effective.

13) Bent-Over Lateral Raises With Dumbbells

- A. Emphasis. This movement develops the posterior deltoids and upperback muscles.
- B. Starting Position. As in the lateral raise, grasp one dumbbell in each hand. Lean over until your body is bent at a 90degree angle. Bend your knees slightly to take the strain off your back.
- C. The Movement. Raise the dumbbells together out laterally to the sides. After reaching the high point of the movement, lower the dumbbells and repeat.
- D. Training Tip. If you bend your elbows and wrists slightly, you will get a much better pump and contraction in the back deltoid muscles. Keep the mind-muscle link focused on the exercised muscles throughout the movement.

14) Walking Calf Raises

- A. Emphasis. This exercise develops the gastrocnemius muscles of the calves.
- B. Starting Position. Grasp a moderately weighted dumbbells in each hand and stand erect with your arms hanging down at your sides.
- C. The Movement. Walk across the gym floor being sure to rise up as high as possible on your toes with each step. Continue walking around the gym until you feel that your calf muscles are comfortably fatigued.
- D. Training Tip. Once your calves are fully warmed up, you can actually hop a little on each repetition.

15) Crunches

- A. Emphasis. This exercise works your upper abdominals.
- B. Starting Position. Lie supine with your legs up on a bench. Your arms can be folded across your chest or your hands clasped behind your head.

- C. The Movement. Slowly curl your shoulders toward your knees until your shoulder blades get 1-2 inches off the floor. Hold for a second, go back to the starting position and repeat.
- D. Training Tip. To get an even better contraction while you are doing your crunch, try to push your lower back into the floor.

16) Leg Raises

- A. Emphasis. This movement works the muscles of the lower abdomen and the upper hip-thigh flexor muscles.
- B. Starting Position. Lie flat on your back on the floor with your lower back firmly against the floor.
- C. The Movement. Stabilizing your body and keeping your lower back flat on the floor, with a slight bend in knees, lift your legs straight up until they are perpendicular to your torso, then lower back until the legs graze the floor and repeat.
- D. Training Tip. To keep tension on the lower abs, make sure your back stays flat against the floor at all times. If you relax and arch your lower back, this movement puts too much stress on your lower back and loses its effectiveness as a lower abdominal builder. To intensify this exercise use an incline bench as shown in illustration.

CHAPTER 11 ADVANCED EXERCISE ROUTINES: THE SPLIT SYSTEM

At this point in your training, you're ready to take another step forward in the gradual progressive method of developing your body to its full potential. You're going to start using my split system of training, working out four times a week instead of three. This will intensify your efforts, taking your body to new heights in muscle size, strength and endurance.

By now you may have reaped the full benefits of exercising your entire body in one workout three times a week. If that's the case, following this plan further (of full body workouts) will defeat the purpose of the progressive resistance training system: If you keep adding weights, reps and sets to your workouts, not only will you overtrain your muscles, but they won't have enough time to recuperate. You also won't have enough energy to exercise each muscle fully.

Such a situation can lead to lopsided development as well as deterioration of muscle - and burnout.

To avoid this, I have created the split system of training. At this time in your training it's the safest way to help you, as it did all my champions. My split system will increase the intensity of your workouts, enabling you to avoid the above pitfalls.

The reason I want you to use this method now is that you can work each muscle area more intensely, allowing it more time

to recuperate fully before exercising it again. Every muscle is thoroughly worked, ensuring that your entire body improves in shape, proportion and symmetry, as I promised you it would.

"When training with heavy weights, compen-sating for leverage changes through an exercise by accelerating your speed of movement can yield great dividends in improvement in size and power."

In using my split system of training, you will be working the upper body one day, allowing yourself to do more exercises and sets for each upper-bodypart than you would normally do when training your whole body in one day. The following day you will only be working on your lower body, again allowing yourself the time to exercise each lowerbody muscle much harder and more intensely. One the third day you will rest and repeat the workout process again on the fourth and fifth days, resting again on the sixth and seventh day. Working out four times a week allows you to exercise every bodypart more intensely twice a week instead of working the entire body three times a week less intensely. You get longer rest periods, helping to induce faster muscle growth. My split system is your next step to intensifying your workouts for faster and more impressive muscular growth.

However, just when you're able to start using this split-system program cannot be judged purely on a time basis. While it's true that you will not be ready for it until you've completed three months of training on the first three courses, just because you have finished this training period is not, in itself, enough reason to make a change.

The guide for you to use is this: If you are still making good gains on your present routine, then do not make a change at this time. Rather, wait until you experience a slowing point in your gains, and then take a full week's rest and start in with this routine. It's wise to get as much as you can out of any routine before changing to another This is true for your entire training career, and it's a good point for you to remember.

Only you can decide if you are ready for the split system of training. You may be ready to follow it now, after three months' training, or you may not be ready for several more months. Remember-don't be too anxious to start on this split routine. You can always go to work on it, but it will not give you maximum benefit unless you have gone as far as you can on the first three programs. And I repeat, you should take a full week's rest *before* starting on the split system!

The purpose of the first three months of training on the first three courses was to give you these following gains: (1) added muscular bodyweight, (2) increased strength, (3) improved recuperation ability, (4) more energy and (5) the maturity to move on to more intense training.

In other words, once you have made the above gains and have exhausted the possibilities of the first three courses, you'll be ready for more advanced training devised to give you even more improvement than before.

Naturally, for you 'to keep progressing in your training, you must be willing to work harder than before.

However, since you are now much stronger and physically fit than ever before, you will actually enjoy this harder training, particularly if you make it a point to follow these rules:

- 1) Get 8-9 hours sleep each night.
- 2) Eat ample quantities of wholesome, nourishing foods. Be sure to add Weider supplements to your daily diet, as recommended in Chapter 24.
- 3) Try to take a 30-minute nap each day. Do everything in your power to conserve your energy while following these courses for the next two months.

I realize that you will have to practice a bit of self-discipline and follow a somewhat Spartan life. But it will be well worth it, as the gains you make will more than repay you for your efforts. Once you have finished these tough split-system routines and have gained from them, you can take training a bit easier but still hold all the gains you have made. Or you can then specialize in further muscular perfection and strive to win fame and glory as a physique champion.

The routines you are about to follow are similar to those which I gave to Reg Park when he trained under my guidance before winning the Mr Universe crown. They are also almost the same routines that Lee Haney, Mr. Olympia, and Corinna Everson, Ms. Olympia, use. Actually, every great champion has used my split system of training in their workouts. Therefore, you can follow the routines with confidence, knowing that they have been carefully selected by the Weider Research Group, based on my own experiences and those of my world champions!

"Let your personality shine through when you get onstage. Display your power and grace dramatically. Show the judges you're the champ!"

Don't rush through the exercises. Concentrate! After you have completed each workout, ask yourself the following questions:

- 1) Have I handled as much weight as I could in each exercise, and in good form?
- 2) Have I performed the correct number of sets and reps?
- 3) Did I concentrate on each exercise and actually *feel* the muscle action?
- 4) Did I honestly give the routine all that was in me?

If the answers to the above questions are yes, then you can be certain that you have done your very best . . . and just watch those results in coming months. Soon you will be able to progress to my superpower and mass-building routines.

HOW TO FOLLOW THE SPLIT SYSTEM

In the split system of training, you are to train four times a week on the following days: Monday, Tuesday, Thursday and Friday. Wednesday, Saturday and Sunday are rest days. The exercises you are to perform on Monday and Tuesday are shown on Chart No. 4, Exercises 1-20. You perform Exercises 1-11 on Monday, Exercises 12-20 on Tuesday.

Thursday you use Chart No. 5, Exercises 1-11. On Friday use Chart No. 5 again, Exercises 12-22.

Read the above over carefully. You do not perform all the exercises that appear on either chart in any single workout. You use only the ones listed as being done for that particular day-no others!

In all exercises and from workout to workout, adjust the poundages you use according to your strength level on that particular day. Some days you will have more energy and will be able to use more weight. Other days the energy may be lower, and you will have to use less. Do not follow any set pattern in increasing poundages. In some movements you may be able to use a few more pounds almost every week. In others, you may find that a certain poundage is your limit for a couple of weeks or longer. The important factor is to use as much as you can and still complete the correct number of sets and repetitions each workout. If you go by this plan, you'll be bound to achieve the best results. Follow this program for two months. Then take a week's rest. If you have been making excellent gains on this program, then stick to it for another month or two. Or you can proceed to the next regular course, the Power and Bulk routine, which is described

you have been making excellent gains on this program, then stick to it for another month or two. Or you can proceed to the next regular course, the Power and Bulk routine, which is described later. However, as explained earlier, you should change from one routine to another only after you have gotten as much out of your routine as possible. If results continue to come at a fast pace, then stick with the routine you're using.

To make certain that you do the right exercises on the right days, I am listing the day, chart number and illustration numbers you are to follow in each workout.

IMPORTANT! There will be exercises that must be performed in Superset style. This means that you do them in the following manner: First, you perform a set doing nine repetitions. Then, without resting, go on to the next exercise and do another nine reps. Only then do you take a short pause. This is a Superset-doing two exercises without pause. If the instructions call for your doing two or more Supersets, it means that you should repeat this process. A number of exercises in this routine are to be performed in Superset style.

CHART 4-INSTRUCTIONS UPPER BODY

Monday (1-11 Exercises) **Sets Reps** 1. Bench Presses 3 9 2. Incline Flyes 3 9 3 9 3. Military Presses Supersets 9 4. Lateral Raises 3 5. Upright Rows 3 9 9 3 6. Bent-Over Rows 3 9 7. Barbell Curls Supersets 9 8. Lying Triceps Extensions 3 9 9. Incline Dumbbell Curls 3 3 10. Side Bends 30-50 } Supersets 11. Crunches

1) Close-Grip Bench Presses

- A. Emphasis. This exercise places primary stress on the pectorals (particularly the inner section), anterior deltoids and triceps.
- B. Starting Position. Take a narrow over-grip in the middle of a moderately weighted barbell (there should be 4-6 inches of space between your index fingers). Lie on your back on a flat exercise bench with your feet flat on the floor to balance your body, and extend your arms straight upward from your shoulders.
- C. The Movement. Bend your arms and slowly lower the barbell downward until it touches your chest. Push it slowly back to the starting point and repeat the movement for the suggested number of repetitions.
- D. Training Tip. The wider the grip in this exercise, the more stress moves from the inner to outer pectorals.

2) Flyes

- A. Emphasis. This movement builds pectorals and deltoids. B. Starting Position. Lie on your back on a flat bench, holding one dumbbell in each hand, pressed up to arm's length above your chest.
- C. The Movement. Lower the dumbbells horizontally, keeping your elbows just slightly bent, and bring the dumbbells out and away, down far enough until you feel a good stretch in your chest area. Your upper arms should go considerably below the line of your body.
- D. Training Tip. If you straighten your arms all the way, this movement is more difficult and does not work the chest as hard. Be sure to take a very deep breath when lowering the dumbbells and exhale as you raise them back through the same arc to the top position.

3) Military Presses

- A. Emphasis. This exercise stresses the deltoids and triceps, with secondary emphasis on the upper pectorals, trapezius and back.
- B. Starting Position. Take a shoulder-width grip on a barbell, palms facing away, with the bar resting across the front of your shoulders.
- C. The Movement. Push the barbell directly up past your face until your arms are locked out straight and the barbell is directly above your head. Slowly lower the barbell back to the starting position and repeat the movement for the required number of repetitions.
- D. Training Tip. Be careful not to bend backward as you press the weight upward. This will make the movement easier to complete, but will rob your shoulders of part of the stress they should be receiving. Never hold your breath! Always wear a weightlifting belt too.

4) Lateral Raises

A. Emphasis. This exercise works the outside or lateral head of your deltoid muscles.

- B. Starting Position. Stand erect, holding one dumbbell in each hand, elbows bent.
- C. The Movement. Raise the dumbbells simultaneously away from the sides of your body until they are level with the top of your head. Lower slowly and repeat.
- D. Training Tip. If you always keep your elbows and wrists slightly bent, you will get a much better action on the lateral head of your deltoids. As you raise the dumbbells, rotate your hands so your little finger is higher than the thumb at the top of the movement. Reverse this as you lower the dumbbells.

5) Upright Rows

- A. Emphasis. Upright rows stress the deltoids and trapezius muscles. Secondary emphasis is placed on the biceps and forearms.
- B. Starting Position. Stand erect with a narrow grip (your index fingers should be about six inches apart on the bar) in the middle of a barbell and your palms toward your body. The barbell should be resting across your upper thighs and your arms straight at the beginning of the movement.
- C. The Movement. Slowly pull the barbell upward along a line close to your body, pulling your elbows upward and keeping them above the level of your hands at all times. When the bar is at your neck level, pause and lower it slowly along the same arc until it again rests across your upper thighs. Repeat for the required number of reps.
- D. Training Tip. Be sure to lower the barbell slowly on each repetition. On upright rows you can receive as much benefit from slowly lowering the bar as from raising it.

6) Bent-Over Lateral Raises With Dumbbells

- A. Emphasis. This movement develops the posterior deltoids and upperback muscles.
- B. Starting Position. As in the lateral raise, grasp one dumbbell in each hand. Lean over until your body is bent at a 90degree angle. Bend your knees slightly to take the strain off your back.
- C. The Movement. Raise the dumbbells together out laterally to the sides. After reaching the high point of the movement, lower the dumbbells and repeat.
- D. Training Tip. If you bend your elbows and wrists slightly, you will get a much better pump and contraction in the back deltoid muscles. Keep the mind-muscle link focused on the exercised muscles throughout the movement.

7) Cheat Curls

- A. Emphasis. This movement stresses the biceps and places secondary stress on the forearms.
- B. Starting Position. Stand erect with a shoulder-width grip on a barbell, palms facing away from your body. Your upper arms should be pinned to the sides of your torso throughout the movement. At the start of the movement, your arms should be straight and the barbell should be resting across your upper thighs

- C. The Movement. Moving just your forearms, bend your arms and move the barbell in a semicircle from your thighs to your chin. Slowly lower the weight along the same arc back to the starting point and repeat.
- D. Training Tip. Be sure to keep your upper body motionless as you curl the weight. Moving your torso and bending your back to get the barbell up will rob the movement of much of its effectiveness. Be sure to lower the bar fully (arms hanging straight down) after having curled it to the top of the movement. Perform a full motion each rep.

8) Lying Triceps Extensions

- A. Emphasis. This movement places stress on the triceps.
- B. Starting Position. Take the same starting position as for the bench press, except that you should use a narrow grip (six inches between your index fingers) in the middle of the barbell.
- C. The Movement. Keeping your upper arms motionless, bend your elbows and move the barbell in a semicircular arc until it touches your forehead or goes back over your head off the end of the bench. Return the barbell along the same arc to the starting position and repeat for the required number of repetitions. D. Training Tip. This movement can also be done while standing erect, sitting on a flat exercise bench; lying on an incline bench or lying on a decline bench.

9) Incline Curls with Dumbbells

- A. Emphasis. These work your upper-arm muscles, particularly your biceps and brachialis.
- B. Starting Position. Lying on the bench on your back holding two dumbbells.
- C. The Movement. Keeping your body against the bench, slowly curl the dumbbells from the down position up to your shoulders and then repeat.
- D. Training Tip. If you move your hands from a fully pronated position (palms down with thumbs in) to a fully supinated position (palms up with thumbs out) at the top of your curl, you will get a supercontraction.

10) Side Bends

- A. Emphasis. The muscles in the sides of your abdominal wall get worked with side bends. Muscles include the external obliques, quadratus lumborum, serratus and rectus abdominis.
- B. Starting Position. Standing, holding a dumbbell in one hand against your side.
- C. The Movement. Bend as far to one side as possible with your other hand held against the back of your neck. Then stand erect and repeat. Make sure you bend straight sideways and not forward or backward. Repeat with the other hand.
- D. Training Tip. Some people respond better to high reps in this exercise.

11) Crunches

- A. Emphasis. This exercise works your upper abdominals.
- B. Starting Position. Lie supine with your legs up on a bench. Your arms can be folded across your chest or your hands clasped behind your head.
- C. The Movement. Slowly curl your shoulders toward your knees until your shoulder blades get 1-2 inches off the floor. Hold for a second, go back to the starting position and repeat. D. Training Tip. To get an even better contraction while you are doing your crunch, try to push your lower back into the floor.

CHART 4-INSTRUCTIONS LOWER BODY

Tuesday (12-20 Exercises) Sets Reps

12. Squats	3	9	
13. Deadlifts	3	9	
14. Shrugs	3	9	
17. Standing Calf Raises	3	9	}
15. Leg Extensions	3	9	} Supersets
16. Leg Curls	3	9	
18. Leg Raises	3	25	
19. Forward Wrist Curls	3	15	1
20. Reverse Wrist Curls	3	15	Supersets

12) Squats

- A. Emphasis. This movement is one of the best exercises you can do, because it affects most of the major muscle groups of the body. The squat works the thigh muscles, hips and buttocks, hamstrings and lower back. The abdominal muscles, upper back, calves and shoulders are stimulated too.
- B. Starting Position. Stand erect with a barbell behind your neck, balancing it across your shoulders by grasping the bar knurls near the plates. Place your heels about 15-20 inches apart, toes angled slightly outward.
- C. The Movement. Fix your eyes on a point in front of you slightly above eye level and keep them there throughout the movement. Then slowly bend your knees and lower your body into a full squat. Be sure to keep your torso upright, your back flat and head up (keeping your vision fixed on a point helps this) during the whole movement. Once your thighs have gone past parallel, then slowly raise up to the starting position. Always try to keep your feet flat.
- D. Training Tip. If you lack ankle flexibility, you'll find it difficult to balance yourself while squatting. You can make your balance more secure by resting your heels on a 2x4-inch board during the movement.

13) Deadlifts

A. Emphasis. This exercise builds your lower back, hip, mid dle back, thigh and trapezius muscles. Also strengthens your grip.

- B. Starting Position. Stand with your shins just grazing the barbell. Bend down naturally and grasp the bar with one hand forward and one hand reversed (to increase your grip power). Stand erect naturally using the power of your legs and back in conjunction. Keep the bar close to your body at all times as you start the lift.
- C. The Movement. Lift the weight from the floor, keeping your arms straight and your back as flat as you can. Bring the bar up keeping it close to your body and lower it back slowly once you have reached the top position, which is the bar against your upper thigh, arms extended. Repeat the exercise for the required number of reps.
- D. Training Tip. Once you have mastered this exercise, you can do deadlifts occasionally, with your knees straight. These are called stiff-leg deadlifts and work your lower back very hard However, this is an advanced exercise and you cannot use as much weight.

14) Shrugs

- A. Emphasis. This movement works the shoulder girdle muscle, including the trapezuis, neck and upper back muscles.
- B. Starting Position. Stand erect and hold a loaded barbell (or dumbbells) at arms' length in front of your body, resting against your thighs. Use a shoulder width, or slightly narrower, grip with palms away from your body.
- C. The Movement. Shrug your shoulders straight up as if trying to touch your ears. Then at the top of the movement, slowly rotate the shoulders back a bit. Do not bend your elbows, and then slowly lower the bar back to the starting position and repeat
- D. Training Tip. If you flex your wrists and concentrate on turning your elbows out, you will get an even better contraction.

15) Leg Extensions

- A. Emphasis. This is the best isolation movement for stressing the quadriceps.
- B. Starting Position. Sit on the bench with the backs of your knees against the edge toward the lever arm. Hook your insteps under the roller pads and grasp the sides of the bench with your hands to steady your torso in an upright position.
- C. The Movement. Use the quad strength to slowly straighten your legs. Hold this peak contracted position for a slow count of two, then lower back to the starting point. Repeat the movement for the desired number of repetitions.
- D. Training Tip. You can also do machine leg extensions with one leg at a time. Normally, the movement is done with toes pointed straight ahead, but you can angle your toes slightly inward or outward as well.

"Noticeable improvements are the result of the cumulative effects of your workouts, with each individual workout contributing to the overall effect."

16) Leg Curls

- A. Emphasis. This is the best isolation movement for stressing the biceps femoris (hamstrings) muscles.
- B. Starting Position. Lie face-down on the table with your knees at the edge of the pad toward the lever arm. Hook your heels under the roller pads and straighten your arms fully. Grasp the sides of the bench and keep your hips on the padded surface throughout the set.
- C. The Movement. Use leg biceps strength to flex your legs as fully as possible. Hold this peak contracted position for a slow count of two, then lower slowly back to the starting point. Repeat the movement for the suggested number of repetitions.
- D. Training Tips. You can also do machine leg curls with one leg at a time. Normally, the movement is done with toes pointed straight downward, but you can angle your toes slightly inward or outward as well.

17) Standing Calf Raises

- A. Emphasis. This movement stresses the gastrocnemius and soleus muscles of your calves.
- B. Starting Position. Place a barbell behind your neck, balancing it as you do when performing a squat. Stand with your toes and the balls of your feet on a 4x4-inch or 2x4-inch block of wood. Your feet should be about 8-10 inches apart,. (toes pointed directly ahead. The lower you can get the heels, the better.) C. The Movement. Keeping your legs straight, rise up as high as possible on your toes. Lower slowly back to the starting point and repeat. You can also do this while holding a dumbbell in your hand.
- D. Training Tip. You might find it difficult to balance yourself, but if you rise up slowly you should be able to manage. Large gyms have a special calf machine that eliminates the balance problem. On your second set of calf raises, point your toes outward at 45-degree angles. On your third set, point them inward at 45-degree angles. Each foot position stresses the calves somewhat differently.

"No matter how puny or fat you are to begin with, if you follow everything I say you'll improve your body more than you could have ever dreamed possible."

18) Leg Raises

- A. Emphasis. This movement works the muscles of the lower abdomen and the upper hip-thigh flexor muscles.
- B. Starting Position. Lie flat on your back on the floor with your lower back firmly against the floor
- C. The Movement. Stabilizing your body and keeping your lower back flat on the floor, with a slight bend in knees, lift your legs straight up until they are perpendicular to your torso, then lower back until the legs graze the floor and repeat.

D. Training Tip. To keep tension on the lower abs, make sure your back stays flat against the floor at all times. If you relax and arch your lower back, this movement puts too much stress on your lower back and loses its effectiveness as a lower abdominal builder. To intensify this exercise use an incline bench as shown in illustration.

19) Wrist Curls-Palms Up

- A. Emphasis. This exercise strongly stimulates the muscles of your forearms.
- B. Starting Position. Sit at the end of a flat exercise bench with your forearms resting on your thighs so your wrists are hanging over your knees. Take a grip on a barbell with your palms up and your inside fingers 8-10 inches apart. Alternatively, you can take a grip of the same width with your palms down.
- C. The Movement. Flex your wrists, curling the barbell upward as high as you can. Return to the starting position and repeat. D. Training Tip. Doing wrist curls with palms up stresses the flexor muscles on the insides of the forearms. Doing them with palms down stresses the extensor muscles on the outsides of the forearms.

20) Reverse Curls

- A. Emphasis. This exercise works the large muscles at the top of your forearms, particularly the brachioradialis.
- B. Starting Position. Standing, holding onto a barbell with your arms down and arms extended in front of your thighs, the bar across your thighs.
- C. The Movement. Keeping your elbows as fixed as possible, curl the weight up to your shoulders slowly and evenly. Lower and repeat.
- D. Training Tip. Avoid extending your wrists when curling and avoid using body heave to make the lift. Both techniques make the movement less effective

CHART 5-INSTRUCTIONS UPPER BODY

Thursday (1-11 Exercises) Sets Reps

1. Close Grip Bench Presses	3	9	
2. Incline Presses	3	9	
3. Pullovers	3	9	
4. Behind-the-Neck Presses	3	9)
5. Bent-Over Lateral Raises	3	9	Supersets
6. Barbell Rows	3	9	
7. Seated Dumbbell Curls	3	9	
8. Concentration Curls	3	9) .
9. Triceps Extensions	3	9	Supersets
10. Side Bends	3	30-50) .
11. Sit-Ups	3	30 50	Supersets

1) Close-Grip Bench Presses

- A. Emphasis. This exercise places primary stress on the pectorals (particularly the inner section), anterior deltoids and triceps.
- B. Starting Position. Take a narrow over-grip in the middle of a moderately weighted barbell (there should be 4-6 inches of space between your index fingers). Lie on your back on a flat exercise bench with your feet flat on the floor to balance your body, and extend your arms straight upward from your shoulders.
- C. The Movement. Bend your arms and slowly lower the barbell downward until it touches your chest. Push it slowly back to the starting point and repeat the movement for the suggested number of repetitions.
- D. Training Tip. The wider the grip in this exercise, the more stress moves from the inner to outer pectorals.

2) Incline Presses

- A. Emphasis. This exercise stresses the upper chest muscles, anterior or front deltoid muscles, and your triceps muscles.
- B. Starting Position. Lying on an incline bench on your back with the bench set at a 35-45 degree angle.
- C. The Movement. Take the bar off the racks using a grip a bit wider than your shoulders. Inhale and lower to the high point of your chest. Without pause, press the weight back up while exhaling.
- D. Training Tip. By using a wider grip and lowering the bar to your clavicles, you'll get a better pump in your chest.

3) Cross-Bench Dumbbell Pullovers

- A. Emphasis. This is the best movement for expanding the ribcage. Significant stress is placed on the pecs, lats and serratus anterior muscles.
- B. Starting Position. Grasp a moderately weighted dumbbell in each hand so your palms are flat against the underside of the top plates and your thumbs are around the bar. Lie on your back across a flat exercise bench so only your upper back and shoulders are in contact with the bench. Your feet should be set about shoulder-width apart and your head should hang slightly downward. With the dumbbell supported at arm's length directly above your chest, bend your arms about 15 degrees and keep them bent throughout the movement.
- C. The Movement. Slowly lower the dumbbell backward and downward in a semicircular arc to as low a position as is comfortably possible. Raise it slowly back along the same arc to the starting point, and repeat the movement for the required number of repetitions.
- D. Training Tip. You will get a better stretch in your chest muscles if you lower your hips slightly as the dumbbell reaches the low position of the movement.

4) Behind-the-Neck Presses

- A. Emphasis. This movement works the big muscles of the upper torso, namely your deltoids, trapezius, upper chest, triceps and some upper-back muscles.
- B. Starting Position. Start with the bar behind your head, resting across your upper back and base of neck.
- C. The Movement. Keeping a wider than shoulder-width grip, press the bar up over your head to arms' length. Return slowly to your neck base and repeat.
- D. Training Tip. If you change the width of your grip periodically, you will stress different muscles. Very wide grips work your deltoids to their max. Narrower grips place a lot of stress on your triceps muscles.

5) Bent-Over Lateral Raises With Dumbbells

- A. Emphasis. This movement develops the posterior deltoids and upper-back muscles.
- B. Starting Position. As in the lateral raise, grasp one dumbbell in each hand. Lean over until your body is bent at a 90degree angle. Bend your knees slightly to take the strain off your back.
- C. The Movement. Raise the dumbbells together out laterally to the sides. After reaching the high point of the movement, lower the dumbbells and repeat.
- D. Training Tip. If you bend your elbows and wrists slightly, you will get a much better pump and contraction in the back deltoid muscles. Keep the mind-muscle link focused on the exercised muscles throughout the movement.

6) Upright Rows

- A. Emphasis. Upright rows stress the deltoids and trapezius muscles. Secondary emphasis is placed on the biceps and forearms.
- B. Starting Position. Stand erect with a narrow grip (your index fingers should be about six inches apart on the bar) in the middle of a barbell and your palms toward your body. The barbell should be resting across your upper thighs and your arms straight at the beginning of the movement.
- C. The Movement. Slowly pull the barbell upward along a line close to your body, pulling your elbows upward and keeping them above the level of your hands at all times. When the bar is at your neck level, pause and lower it slowly along the same arc until it again rests across your upper thighs. Repeat for the required number of reps.
- D. Training Tip. Be sure to lower the barbell slowly on each repetition. On upright rows you can receive as much benefit from slowly lowering the bar as from raising it.

7) Seated Dumbbell Curls

A. Emphasis. This is a very good biceps movement, which also places stress on the forearm flexors.

- B. Starting Position. Grasp a moderately weighted dumbbell in each hand and sit astride a flat exercise bench with your feet flat on the floor. Allow your arms to hang straight down at your sides with your palms facing each other Press your upper arms against the sides of your torso and keep them in this position throughout the set.
- C. The Movement. Curl the weight in your left hand upward, rotating your wrist so your palm faces upward during the second half of the movement. Reverse this procedure to lower the weight back to the starting point. As the weight in your left hand descends, curl the weight in your right hand upward, turning your wrist so your palm is facing upward during the second half of the movement. Continue curling the dumbbells in seesaw fashion until you have done the listed number of repetitions with each arm. D. Training Tip. This movement can also be done curling the dumbbells upward simultaneously.

"Advanced bodybuilders often make use of fast movements to improve training intensity. But they don't neglect their controlled movements, as they produce the greatest gains."

8) Concentration Curls

- A. Emphasis. This movement works your upper arms, especially your biceps.
- B. Starting Position. Seated, or bent forward from the waist with your arm braced against the inside of your thigh.
- C. The Movement. Slowly curl your lower arm up toward your chest, but keep your upper arm stationary, tucked in against your inner thigh.
- D. Training Tip. Do not flex your wrist when you lift the weight because this will enlist the aid of your forearm muscles, making it easier to lift. Feel the movement throughout the entire range. Hold and squeeze the contraction as hard as possible for a full three seconds, then lower slowly.

9) Dumbbell Triceps Extensions

- A. Emphasis. This movement places direct stress on the triceps muscles of the upper arm.
- B. Starting Position. Grasp a light dumbbell in your left hand and sit at the end of a flat exercise bench. Place your right hand on your hip and extend your left arm straight upward from your shoulder, your palm facing forward throughout the movement. C. The Movement. Keeping your upper arm motionless, allow the dumbbell to travel backward and downward in a semicircular arc to as low a position as possible. Use triceps strength to move it back along the same arc to the starting position. Repeat. Be sure that you do an equal number of sets and reps for each arm.
- D. Training Tip. You can also move the weight diagonally across your body rather than directly to the rear.

10) Side Bends

A. Emphasis. The muscles in the sides of your abdominal wall get worked with side bends. Muscles include the external obliques, quadratus lumborum, serratus and rectus abdominis. B. Starting Position. Standing, holding a dumbbell in one hand against your side.

- C. The Movement. Bend as far to one side as possible with your other hand held against the back of your neck. Then stand erect and repeat. Make sure you bend straight sideways and not forward or backward. Repeat with the other hand.
- D. Training Tip. Some people respond better to high reps in this exercise.

11) Knee-Ups

- A. Emphasis. This exercise stresses the entire rectus abdominuscle wall, particularly the lower half of the muscle complex.
- B. Starting Position. Sit at the end of a flat exercise bench and incline your torso backward until it is at a 45-degree angle with the bench. Grasp the sides of the bench with your hands to brace your torso in this position. Extend your legs downward until they are at approximately a 45-degree angle with the floor, making them part of one long line with your torso.
- C. The Movement. Use abdominal strength to pull your knees up to your chest as you simultaneously bend your legs fully. Lower slowly back to the starting point, and repeat the movement.
- D. Training Tip. A similar movement, called frog kicks, can be performed while hanging from your hands on a chinning bar, pulling your knees up to your chest.

CHART 5-INSTRUCTIONS LOWER BODY

Friday (12-22 Exercises)	Sets	Reps	
12. Squats	3	9	
13. Leg Extensions	3	9	
14. Leg Curls	3	9	} Supersets
15. Lunges	3	9	3 Supersets
16. Deadlifts	3	9	
17. Shrugs	3	9	} Supersets
18. One Arm Rows	3	9	3 Supersets
19. Walking Calf Raises	3	15	
20. Reverse Curls	3	15	
21. Twisting Sit-Ups	3	30 50	} Supersets
22. Knee-Ups	3	30-50	Superseis

12) Squats

A. Emphasis. This movement is one of the best exercises you can do, because it affects most of the major muscle groups of the body. The squat works the thigh muscles, hips and buttocks,

- hamstrings and lower back. The abdominal muscles, upper back, calves and shoulders are stimulated too.
- B. Starting Position. Stand erect with a barbell behind your neck, balancing it across your shoulders by grasping the bar knurls near the plates. Place your heels about 15-20 inches apart, toes angled slightly outward.
- C. The Movement. Fix your eyes on a point in front of you slightly above eye level and keep them there throughout the movement. Then slowly bend your knees and lower your body into a full squat. Be sure to keep your torso upright, your back flat and head up (keeping your vision fixed on a point helps this) during the whole movement. Once your thighs have gone past parallel, then slowly raise up to the starting position. Always try to keep your feet flat.
- D. Training Tip. If you lack ankle flexibility, you'll find it difficult to balance yourself while squatting. You can make your balance more secure by resting your heels on a 2x4-inch board during the movement.

13) Leg Extensions

- A. Emphasis. This is the best isolation movement for stressing the quadriceps.
- B. Starting Position. Sit on the bench with the backs of your knees against the edge toward the lever arm. Hook your insteps under the roller pads and grasp the sides of the bench with your hands to steady your torso in an upright position.
- C. The Movement. Use the quad strength to slowly straighten your legs. Hold this peak contracted position for a slow count of two, then lower back to the starting point. Repeat the movement for the desired number of repetitions.
- D. Training Tip. You can also do machine leg extensions with one leg at a time. Normally, the movement is done with toes pointed straight ahead, but you can angle your toes slightly inward or outward as well.

14) Leg Curls

- A. Emphasis. This is the best isolation movement for stressing the biceps femoris (hamstrings) muscles.
- B. Starting Position. Lie face-down on the table with your knees at the edge of the pad toward the lever arm. Hook your heels under the roller pads and straighten your arms fully. Grasp the sides of the bench and keep your hips on the padded surface throughout the set
- C. The Movement. Use leg biceps strength to flex your legs as fully as possible. Hold this peak contracted position for a slow count of two, then lower slowly back to the starting point. Repeat the movement for the suggested number of repetitions.
- D. Training Tips. You can also do machine leg curls with one leg at a time. Normally, the movement is done with toes pointed straight downward, but you can angle your toes slightly inward or outward as well.

"Train for muscular balance, and strength will follow."

15) Lunges

- A. Emphasis. This movement stresses your upper hamstrings, butt muscles and quadriceps.
- B. Starting Position. Stand erect with the barbell across your shoulders. Take a long step forward and sink slowly into a squat with that leg extended.
- C. The Movement. When you have lowered into that extended position, use your leg to bring yourself erect again. Then step out with the other foot and repeat.
- D. Training Tip. If you only push yourself up three quarters of the way or just short of full extension, you will keep constant tension on your quadriceps.

16) Deadlifts

- A. Emphasis. This exercise builds your lower back, hip, middle back, thigh and trapezius muscles. Also strengthens your grip.
- B. Starting Position. Stand with your shins just grazing the barbell. Bend down naturally and grasp the bar with one hand forward and one hand reversed (to increase your grip power). Stand erect naturally using the power of your legs and back in conjunction. Keep the bar close to your body at all times as you start the lift.
- C. The Movement. Lift the weight from the floor, keeping your arms straight and your back as flat as you can. Bring the bar up keeping it close to your body and lower it back slowly once you have reached the top position, which is the bar against your upper thigh, arms extended. Repeat the exercise for the required number of reps.
- D. Training Tip. Once you have mastered this exercise, you can do deadlifts occasionally, with your knees straight. These are called stiff-leg deadlifts and work your lower back very hard. However, this is an advanced exercise and you cannot use as much weight.

17) Shrugs

- A. Emphasis. This movement works the shoulder girdle muscle, including the trapezuis, neck and upper back muscles.
- B. Starting Position. Stand erect and hold a loaded barbell (or dumbbells) at arms' length in front of your body, resting against your thighs. Use a shoulder width, or slightly narrower, grip with palms away from your body.
- C. The Movement. Shrug your shoulders straight up as if trying to touch your ears. Then at the top of the movement, slowly rotate the shoulders back a bit. Do not bend your elbows, and then slowly lower the bar back to the starting position and repeat.
- D. Training Tip. If you flex your wrists and concentrate on turning your elbows out, you will get an even better contraction.

18) One-Arm Rows

A. Emphasis. This exercise works the upper-back muscles, especially the lats, and your arm flexors, especially the biceps. B. Starting Position. Bend forward, keeping one arm and knee

- stabilized on a bench. Reach down with the other arm and grasp a dumbbell lying on the floor.
- C. The Movement. Pull the dumbbell up to your shoulder or higher, using your back muscles. Lower slowly, getting a good stretch and repeat.
- D. Training Tip. Remember to do this with both arms and twist your body a little as you pull the dumbbell to the top so that you can pull it through a greater range of motion for greater development.

19) Walking Calf Raises

- A. Emphasis. This exercise develops the gastrocnemius muscles of the calves.
- B. Starting Position. Grasp a moderately weighted dumbbells in each hand and stand erect with your arms hanging down at your sides.
- C. The Movement. Walk across the gym floor being sure to rise up as high as possible on your toes with each step. Continue walking around the gym until you feel that your calf muscles are comfortably fatigued.
- D. Training Tip. Once your calves are fully warmed up, you can actually hop a little on each repetition.

20) Reverse Curls

- A. Emphasis. This exercise works the large muscles at the top of your forearms, particularly the brachioradialis.
- B. Starting Position. Standing, holding onto a barbell with your arms down and arms extended in front of your thighs, the bar across your thighs.
- C. The Movement. Keeping your elbows as fixed as possible, curl the weight up to your shoulders slowly and evenly. Lower and repeat.
- D. Training Tip. Avoid extending your wrists when curling and avoid using body heave to make the lift. Both techniques make the movement less effective.

21) Twisting Sit-Ups

- A. Emphasis. This movement stresses the entire rectus abdominis muscle wall, particularly the upper half of the muscle complex.
- B. Starting Position. Lie back on an abdominal board with your head at the lower end and hook your toes beneath the roller pads or strap provided at the upper end of the bench. Bend your legs approximately 30 degrees and keep them bent during your set to relieve potentially harmful stress on your lower back. Place your hands behind your head and neck and keep them there throughout the set.
- C. The Movement. Do a normal sit-up movement, but as you reach the halfway point, begin to twist your torso so you can touch your left elbow to your right knee at the top. Reverse the procedure to lower back to the starting point. On the next rep, twist in the opposite direction, so you can touch your right elbow to your

left knee. Continue twisting alternately from one side to the next until you have completed the desired number of sets.

D. Training Tip. To increase intensity, you can incrementally raise the foot end of the bench (the higher the foot end of the bench, the more intense your set of twisting sit-ups).

22) Knee-Ups

- A. Emphasis. This exercise stresses the entire rectus abdomimuscle wall, particularly the lower half of the muscle complex.
- B. Starting Position. Sit at the end of a flat exercise bench and incline your torso backward until it is at a 45-degree angle with the bench. Grasp the sides of the bench with your hands to brace your torso in this position. Extend your legs downward until they are at approximately a 45-degree angle with the floor, making them part of one long line with your torso.
- C. The Movement. Use abdominal strength to pull your knees up to your chest as you simultaneously bend your legs fully. Lower slowly back to the starting point, and repeat the movement.
- D. Training Tip. A similar movement, called frog kicks, can be performed while hanging from your hands on a chinning bar, pulling your knees up to your chest.

CHAPTER 12 POWER AND BULK ROUTINES

To Be Followed ONLY by Students Who Have Completed the Beginner and Split Training Programs

Now that you have satisfactorily completed my split system of training, I feel certain that you will want to go further in bodybuilding, either right up to the point where you will be a celebrated champion or just getting the most out of your body in terms of your muscularity and power. You'll want to reach your peak development. That's the overriding mission of most of my students. But to reach your peak muscle development, you must now take a drastic change in your training. Here's why:

What you need *most* at this stage of your training is a real step-up in physical *power*. Not the type of increase that comes from merely adding more weight regularly to the poundages you use in your usual exercises, but an all-out effort to build up maximum strength and size.

You must develop this. Without it you cannot hope to add that massive muscular bulk for the herculean look you're striving for Physical power and potential muscle size are related. The Weider Research Group has definitely established this fact and I have often seen it proven in my training of the world's biggest stars.

I remember that when Reg Park, one of our greatest bodybuilding champions, first visited America back in 1949, he possessed a good physique, one which had already won him the title of Mr.

Britain. Still, in his exercise routines, he persisted in using comparatively light movements devised more to flush up the muscles than to require a maximum effort. At the time his upper arms measured 17 inches in circumference.

At my suggestion he made his workouts shorter and pushed himself to his limits in power. The results were dramatic. As he gained new power in the bench press, curls, dumbbell presses, squats and other exercises in his program, he also gained sensational new muscle size and greater physical impressivenessas his 20-inch upper arms, 51-inch chest and 27-inch thighs indicate. Without this power routine he would never have developed his huge size or commanding strength!

Further proof of the importance of real power for greater muscular size came to light in the late Sixties when Sergio Oliva, The Myth from Cuba, broke upon the scene in Chicago and established himself as the world's most massive bodybuilder. Sergio was a competitive Olympic lifting champion before he

"You must make your muscles work harder and, by carrying each set to failure, you'll be doing just that."

began specific bodybuilding training. Because Sergio loved strength, he always made it a point to handle heavy weights and to train for power and size during his early bodybuilding years. By training with power and bulk routines, Sergio became the biggest, thickest bodybuilder in history, and to this day he is one of my greatest champions.

Then, in the Seventies, a new bodybuilder of enormous size and power burst upon the scene. This was the great champion and now movie star, Arnold Schwarzenegger, whom I had brought to the USA from Austria. By following the tenets of my power and bulk exercise programs, Arnold developed a 56-inch chest and 21-inch arms. By winning all the big IFBB titles, including Mr Olympia seven times, Arnold went on to become one of the greatest bodybuilders in history. Although he's retired from competitive bodybuilding, he still retains much of the size and power he developed during the days he followed my power and bulk routines.

Today, each of these men is still massive!

I offer the above illustrations to impress you with the importance of working for *power* when training for maximum muscular bulk. If you do, then not only will you gain more size *because* of this power, but you will also be able to train harder in future programs due to your increased strength. In this way, an endless chain of bodybuilding results will be yours.

Old-fashioned bodybuilding courses do *not* take this vital success factor into consideration. It is for that reason that those who follow such courses fail to get the results Weider students do. In this course I left *nothing* to chance. I have carefully and scientifically arranged everything for your benefit.

Space does not always permit me to go into detail explaining *why* a certain principle should be followed in your training or *why you* should change from one routine to another. But you may be certain that the mere fact that this advice is given to you means

that it has been *proven* necessary for your own benefit and you should follow the advice with confidence.

In training for power, you have to follow different principles than you did in the past. Your workouts must be shorter but far more intense than before. You should add more fuel nutrients and nonfuel essential nutrients to your diet. The following are some of my best supplements:

- 1) Life Essence
- 2) Anabolic Mega Pak
- 3) Dynamic Muscle Builder 4) Megabolic Mega Pak
- 5) Carbo-Energizer
- 6) Aminobolic Mega Pak 7) Pre-Stress

They contribute amino acids, proteins, vitamins, minerals, trace elements, plus essential fatty acids and carbohydrates. Then, too, you must build up a real training drive. You cannot feel any letdown during your workouts. The importance of using Weider Pre-Stress and Carbo Energizer to help you here cannot be overlooked.

You must get more sleep, too, at least 8-9 hours a night. It is also very important that you restrict all your physical exercise to your workouts. You cannot participate in strenuous sports and improve as you should while on this program.

You must also not add any more exercises to this routine nor train more often than four times a week. Every ounce of your energy should be channeled into your workouts!

CHART 6-POWER AND BULK ROUTINES EXERCISES

Monday-Wednesday-Friday	Sets	Reps
1. Bench Presses	4-5	6
2. Squats	4-5	6
3. Deadlifts	4-5	6
4. Military Presses	4-5	6
5. Barbell Rows	4-5	6
6. Behind-the-Neck Presses	4-5	6
7. Bent Arm Pullovers	4-5	6
8. Cheat Curls	4-5	6
9. Leg Extensions	4-5	6
10. Leg Curls	4-5	6
11. Upright Rows	4-5	6
12. Crunch Sit-Ups	4-5	6

Each exercise should be performed in 4-5 sets. Try to use a weight which will permit you to perform six repetitions each set in perfect form. I say try to use such a weight, for it will not always be possible for you to do it, as I will now explain.

Using the bench press as an example, here is what you should do. Following a good warm-up and a set or two of light bench presses, select a weight with which you feel you can perform six correct repetitions. Perform this first set, and if your weight selection has been correct, you will succeed with the six repetitions without much strength to spare. Then take a two-minute rest, making sure that you do not cool off. Then perform a second set. Repeat this

process until you have completed 4-5 sets. You should always try to complete a full set of six reps even if you need to force out the last one with some help from your training partner or a slight cheat on your last couple of reps. You should try to get six reps on each set. If you are training with maximum weights, though, you may get six reps on your first two sets, five reps on your third and fourth and maybe only four reps on your last set. Never use a weight so heavy that you fail to perform at least four reps. This assures that you use a very heavy poundage and that you constantly push yourself for greater muscular growth and power. This constant forcing yourself, within reason, will pack on the muscular size you want.

As soon as the handling of the weights you use becomes easy and you find that you're not forcing yourself to complete the last rep of each set, immediately add more weight to your barbell and keep pushing yourself again to force out the last rep of every set. This method of increasing weight is followed indefinitely. However, what's more important is always making certain that you try to do six reps for each set and 4-5 sets of each exercise. If you need to cheat slightly, you may do so on your last rep. Moreover, only cheat to put stress on a muscle-not to remove it!

Study the above carefully; it is your key to fast muscle and power gains.

In the next two chapters, you will see other methods to develop muscle size and power. After you understand cycling and how to coordinate routines, you will have the base to use my principles, also outlined later. The idea I want to give you is that it's important for you to progress continuously. Therefore, you only move on to the power and bulk routines after having mastered my beginning programs and split system. Then, after using my power and bulk routines, you use my instinctive training principle in concert with my other time-tested principles to put together your own personalized training routines. Step by step, you go up the ladder of intensity. You do it safely and gradually to become either a champion or the best you can be!

For now, the entire pattern to follow during this part of your training is to concentrate on using heavier weights all the time. Think always of power, power, power!

Just how long you stay on this program depends pretty much on your physique type. Some bodybuilders find it easier to gain bulk than others. They must watch themselves carefully to make certain that they do not bulk up too fast and lose their muscular lines. If bodyweight increases come exceptionally fast, then eat a bit less of fatty, starchy, weightgaining foods. And then, if you're still packing on bodyweight too fast, discontinue this program after one month and go into the advanced schedules that are explained in the next chapter.

On the other hand, if you do not make gains as quickly on this program as you had hoped, then include more high-calorie liquids and high-calorie foods in your diet, and nibble on figs, dates and other snacks high in calorie content between your regular meals. Not enough to spoil your appetite, just a little extra to increase your daily calorie intake. I strongly suggest you also include Weider Crash Weight Gain No. 7 or my Muscle Builder drink in your diet.

If you are an average gainer, you can continue on this program for a full three months. Then you are to advance to the next one, outlined in the following chapter. This does not mean that at some future date you cannot come back to this same program and once again gain more bulk and power from it. It does mean that any program continued for more than 2-3 months may induce a static, monotonous bodybuilding approach, one that defeats your progress.

So after 2-3 months, you're to stop this program, take a week layoff and go on to the next program in this course.

The exercises you're to follow are included at the end of this chapter and illustrated on Chart No. 6. I have already told you exactly how to arrive at the correct poundage, how many repetitions and sets you should do.

This concludes your power and bulk routine. Follow it as indicated and your results should be sensational! However, remember these points:

- Train 3-4 times a week.
- · Get plenty of sleep.
- Do not participate in any other sports while on this program.
- If you are a fast gainer and show signs of losing your definition and bulking up too much, follow this course only for the two months and cut down on your calories.
- If you are average or a slow gainer, then follow this routine for a full three months. If gains come exceptionally slowly, then add Weider Crash Weight Gain to your diet and increase your intake of high-calorie drinks. Eat several small snacks each day between meals as well.

EVERYONE: This is a very difficult routine. You will need plenty of rest and energy.

CHART 6-INSTRUCTIONS

1) Bench Presses

- A. Emphasis. Bench presses stress the pectorals, deltoids and triceps. Most champion bodybuilders consider the bench press one of the best upper-body exercises.
- B. Starting Position. Lying on your back on a flat exercise bench, take a slightly wider than shoulder-width grip on a barbell, palms facing upward. Your arms should be straight and the barbell supported directly above your chest.
- C. The Movement. Making sure that your upper arms travel directly out to the sides, slowly bend your arms and lower the barbell straight downward until it touches the middle of your chest at just about your nipple line. Push back up to the starting position and repeat the movement for the suggested number of repetitions. D. Training Tip. Be sure not to arch your back or hold your breath. This takes stress off the muscles being worked and can be dangerous.

2) Squats

A. Emphasis. This movement is one of the best exercises you can do, because it affects most of the major muscle groups of the

body. The squat works the thigh muscles, hips and buttocks, hamstrings and lower back. The abdominal muscles, upper back, calves and shoulders are stimulated too.

- B. Starting Position. Stand erect with a barbell behind your neck, balancing it across your shoulders by grasping the bar knurls near the plates. Place your heels about 15-20 inches apart, toes angled slightly outward.
- C. The Movement. Fix your eyes on a point in front of you slightly above eye level and keep them there throughout the movement. Then slowly bend your knees and lower your body into a full squat. Be sure to keep your torso upright, your back flat and head up (keeping your vision fixed on a point helps this) during the whole movement. Once your thighs have gone past parallel, then slowly raise up to the starting position. Always try to keep your feet flat.
- D. Training Tip. If you lack ankle flexibility, you'll find it difficult to balance yourself while squatting. You can make your balance more secure by resting your heels on a 2x4-inch board during the movement.

3) Deadlifts

- A. Emphasis. This exercise builds your lower back, hip, middle back, thigh and trapezius muscles. Also strengthens your grip.
- B. Starting Position. Stand with your shins just grazing the barbell. Bend down naturally and grasp the bar with one hand forward and one hand reversed (to increase your grip power). Stand erect naturally using the power of your legs and back in conjunction. Keep the bar close to your body at all times as you start the lift.
- C. The Movement. Lift the weight from the floor, keeping your arms straight and your back as flat as you can. Bring the bar up keeping it close to your body and lower it back slowly once you have reached the top position, which is the bar against your upper thigh, arms extended. Repeat the exercise for the required number of reps.
- D. Training Tip. Once you have mastered this exercise, you can do deadlifts occasionally, with your knees straight. These are called stiff-leg deadlifts and work your lower back very hard. However, this is an advanced exercise and you cannot use as much weight.

"You build muscles by subjecting them to a relatively few number of reps for three or four sets."

4) Military Presses

- A. Emphasis. This exercise stresses the deltoids and triceps, with secondary emphasis on the upper pectorals, trapezius and back.
- B. Starting Position. Take a shoulder-width grip on a barbell, palms facing away, with the bar resting across the front of your shoulders.
- C. The Movement. Push the barbell directly up past your face until your arms are locked out straight and the barbell is directly above your head. Slowly lower the barbell back to the starting position and repeat the movement for the required number of repetitions.

D. Training Tip. Be careful not to bend backward as you press the weight upward. This will make the movement easier to complete, but will rob your shoulders of part of the stress they should be receiving. Never hold your breath! Always wear a weightlifting belt too.

5) Upright Rows

- A. Emphasis. Upright rows stress the deltoids and trapezius muscles. Secondary emphasis is placed on the biceps and forearms
- B. Starting Position. Stand erect with a narrow grip (your index fingers should be about six inches apart on the bar) in the middle of a barbell and your palms toward your body. The barbell should be resting across your upper thighs and your arms straight at the beginning of the movement.
- C. The Movement. Slowly pull the barbell upward along a line close to your body, pulling your elbows upward and keeping them above the level of your hands at all times. When the bar is at your neck level, pause and lower it slowly along the same arc until it again rests across your upper thighs. Repeat for the required number of reps.
- D. Training Tip. Be sure to lower the barbell slowly on each repetition. On upright rows you can receive as much benefit from slowly lowering the bar as from raising it.

6) Behind-the-Neck Presses

- A. Emphasis. This movement works the big muscles of the upper torso, namely your deltoids, trapezius, upper chest, triceps and some upperback muscles.
- B. Starting Position. Start with the bar behind your head, resting across your upper back and base of neck.
- C. The Movement. Keeping a wider than shoulder-width grip, press the bar up over your head to arms' length. Return slowly to your neck base and repeat.
- D. Training Tip. If you change the width of your grip periodically, you will stress different muscles. Very wide grips work your deltoids to their max. Narrower grips place a lot of stress on your triceps muscles.

"For inspiration, project an enhanced vision of yourself - larger and more muscular before you begin your workouts."

7) Bent-Arm Barbell Pullovers

- A. Emphasis. This exercise builds your chest, triceps, serratus and upper-back muscles, especially the latissimus dorsi.
- B. Starting Position. Lie on your back on a bench with your head hanging off the end, with the barbell on the floor just behind your head.
- C. The Movement. Reach back and grasp the bar with a slightly narrower than shoulder-width grip, pull the bar over your head with your elbows bent. Return and repeat.

D. Training Tip. You can use a lot of weight with bent-arm pullovers, as compared to straight-arm pullovers, so you can build more power and size with this movement.

8) Cheat Curls

- A. Emphasis. This movement stresses the biceps and places secondary stress on the forearms.
- B. Starting Position. Stand erect with a shoulder-width grip on a barbell, palms facing away from your body. Your upper arms should be pinned to the sides of your torso throughout the movement. At the start of the movement, your arms should be straight and the barbell should be resting across your upper thighs.
- C. The Movement. Moving just your forearms, bend your arms and move the barbell in a semicircle from your thighs to your chin. Slowly lower the weight along the same arc back to the starting point and repeat.
- D. Training Tip. Be sure to keep your upper body motionless as you curl the weight. Moving your torso and bending your back to get the barbell up will rob the movement of much of its effectiveness. Be sure to lower the bar fully (arms hanging straight down) after having curled it to the top of the movement. Perform a full motion each rep.

9) Leg Extensions

- A. Emphasis. This is the best isolation movement for stressing the quadriceps.
- B. Starting Position. Sit on the bench with the backs of your knees against the edge toward the lever arm. Hook your insteps under the roller pads and grasp the sides of the bench with your hands to steady your torso in an upright position.
- C. The Movement. Use the quad strength to slowly straighten your legs. Hold this peak contracted position for a slow count of two, then lower back to the starting point. Repeat the movement for the desired number of repetitions.
- D. Training Tip. You can also do machine leg extensions with one leg at a time. Normally, the movement is done with toes pointed straight ahead, but you can angle your toes slightly inward or outward as well.

10) Leg Curls

- A. Emphasis. This is the best isolation movement for stressing the biceps femoris (hamstrings) muscles.
- B. Starting Position. Lie face-down on the table with your knees at the edge of the pad toward the lever arm. Hook your heels under the roller pads and straighten your arms fully. Grasp the sides of the bench and keep your hips on the padded surface throughout the set.
- C. The Movement. Use leg biceps strength to flex your legs as fully as possible. Hold this peak contracted position for a slow count of two, then lower slowly back to the starting point. Repeat the movement for the suggested number of repetitions.

D. Training Tips. You can also do machine leg curls with one leg at a time. Normally, the movement is done with toes pointed straight downward, but you can angle your toes slightly inward or outward as well.

11) Upright Rows

- A. Emphasis. Upright rows stress the deltoids and trapezius muscles. Secondary emphasis is placed on the biceps and forearms.
- B. Starting Position. Stand erect with a narrow grip (your index fingers should be about six inches apart on the bar) in the middle of a barbell and your palms toward your body. The barbell should be resting across your upper thighs and your arms straight at the beginning of the movement.
- C. The Movement. Slowly pull the barbell upward along a line close to your body, pulling your elbows upward and keeping them above the level of your hands at all times. When the bar is at your neck level, pause and lower it slowly along the same arc until it again rests across your upper thighs. Repeat for the required number of reps.
- D. Training Tip. Be sure to lower the barbell slowly on each repetition. On upright rows you can receive as much benefit from slowly lowering the bar as from raising it.

12) Crunches

A. Emphasis. This exercise works your upper abdominals.

- B. Starting Position. Lie supine with your legs up on a bench. Your arms can be folded across your chest or your hands clasped behind your head.
- C. The Movement. Slowly curl your shoulders toward your knees until your shoulder blades get 1-2 inches off the floor. Hold for a second, go back to the starting position and repeat. D. Training Tip. To get an even better contraction while you are doing your crunch, try to push your lower back into the floor.

"When beginning a weight training program, avoid jerky, ballistic movements in performing your reps."

CHAPTER 13 CYCLE TRAINING TECHNIQUES

his chapter introduces you to a very important concept that will enable you to train and make progress for years. It's the principle that allows all my championship students to keep progressing workout after workout to ultimately reach the top. It's the Weider Cycle Training Principle.

Every year bodybuilding seems to have a new shooting star, a man or woman who has followed my course with ultimate dedication and who reaches the top very quickly. Unfortunately, these individuals can be very much like real shooting stars. They flame brightly for a brief time and then burn out, fading back to nowhere. The problem with these shooting stars is that they are not patient enough to cycle their workouts as I advise them. If they do as I advise, their initial progress might be a little slower but they won't burn out or suffer injuries. These shooting stars did superintense workouts over too long a period before they accumulated enough strength and recuperative powers to benefit from these workouts. Their impatience to reach the top so quickly made them ignore my advice to incorporate my cycle training tenets. They pushed themselves too hard and soon burned out. Pay attention to what I

tell you here so it does not happen to you!

My secret to getting you to achieve your ultimate physical muscle development is to show you how to successfully alternate yearly periods of heavy, intense training with periods of lighter, less

One of our most successful and intelligent champions, Frank Zane, is a proponent of my cycle training methods. This, I believe, has kept Frank on top for a phenomenal 25 years! I'll let Frank tell you how he cycles his training:

intense workouts.

"After my main contest each year, I always take a month off from working out, but I am careful with my diet, as I do not want to gain fat. The layoff allows my body and mind to recuperate from my previous allout training. All my minor training injuries disappear. Then, at the beginning of my new cycle, being fully rejuvenated, I start up serious bodybuilding again. Over a fourmonth period, I gradually increase the intensity of my training until I reach a moderate peak. Then, after this first cycle peak, I begin a new phase of cycle intensity that results in a new and greater peak later on. Finally, I cut back slightly again for a short time and then recycle up again to peak for the contest:'

In bodybuilding, I encourage my students to do both volume and intensity work. Volume work means you might use differing weights for both high and low repetitions with basic exercises. Intensity training means you try to constantly increase the amount of weight you use to build new muscle mass. This type of intensity training is the kind that, if done year round, might lead to burnout and training injuries. At other times, I like my students to do Quality Training, in which they lighten their exercise loads, increase their reps and train with shorter rest periods between sets and exercises. (See Weider Principles.)

When you are not preparing for a contest or not trying to get as ripped as you can (off-season workouts) for whatever reason, this is the time to use intensity training to develop mass. It's also the time to work on weak points, such as proportion and shape, as well as the time to eat high calorie, protein diets. You won't train for all-out definition during this period. During this phase, which I will call the off-season, you must train as heavily as you can, but only for sets in the range of 6-10 reps. Doing limit singles invites joint and muscle injuries, so there's no point in a bodybuilder trying to see how much he can lift in a maximum single effort.

"Use every mode of input you can to coax muscle growthvisual scrutiny, sense of touch, mental concentration, and other biofeedback mechanisms improve the rate and extent of training effect."

Remember - you're bodybuilding, not powerlifting.

The best bodybuilders train with basic exercises in the offseason. Rick Gaspari, another of my great international champions, says: "When you're training for added power and muscle mass, you should work with those basic exercises in which you can use heavy weights to develop large muscles."

Here's a list of the best basic exercises for each major muscle group.

MUSCLE GROUP	EXERCISES
Pectorals (upper)	Incline Barbell/Dumbbell Presses
Pectorals (lower)	Dips, Decline Barbell/Dumbbell Presses
Pectorals (general)	Flat-Bench Barbell/Dumbbell Presses
Lats (width)	Chins, Pulldowns
Lats (thickness)	Barbell/Dumbbell Bent Rowing, Seated Pulley Rowing, T -Bar Rowing
Trapezius	Barbell/Dumbbell/Pulley, Upright Rowing
Spinal Erectors	Deadlifts, Stiff-Legged Deadlifts, Hyperextensions
Deltoids	Barbell/Dumbbell/Machine Overhead Presses Upright Rowing
Biceps	Barbell Curls, Standing Dumbbell Curls, Barbell/Dumbbell Preacher Curls
Triceps	Lying Barbell Triceps Extensions, Narrow-Grip Bench Presses, Dips
Forearms	Barbell Wrist Curls/Reverse Wrist Curls, Reverse Curls
Calves	Standing/Seated Calf Machine Toe Raises

In my long experience as a bodybuilding trainer, I have found that most of my advanced students react best to the Weider Pyramid Overload Principle in their off-season training. In such a pyramid scheme, you will add weight and decrease the repetitions you do with each succeeding set and then go back down in weight and increase the reps again. Pyramiding allows you to give your muscles a good warmup before using maximum weights, an ideal condition in off-season mass and power training.

Here is a typical rep/poundage scheme when pyramiding sets in the bench press (weights have been arbitrarily selected): Let's say your maximum bench press for one repetition is 260 pounds. Follow a pyramid scheme like this:

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135 lbs. x 1 set x 15 reps.

175 lbs. x 1 set x 12 reps.

195 lbs. x 1 set x 10 reps.

215 lbs. x 1 set x 8 reps

225 lbs. x 2 sets x 6 reps.

195 lbs. x 1 set x as many reps as you can do.

End of bench pressing

In the off-season then, you would train on a cycle system while ncorporating a split system. This means that you will train your upper body twice a week, as explained in my chapter on the Split System of Training, (deltoids, chest, biceps, triceps, upper back) and your lower body twice a week (thighs, hamstrings, ower back, calves and abdominals). Pick 2-3 basic exercises for each bodypart (like chest -bench presses, incline presses and flyes) and train heavily with eight repetitions for around 3-4 sets of each exercise. To build off-season power and bulk, you can work with my pyramid set system, such as four sets of 6-10 repetitions, and occasionally use my superset system (such as for biceps and triceps), or my conventional set system, as I described earlier. The point is, this type of training is best for mass, but should be cycled throughout the year to prevent injuries and burnout. It's the bulk of your off-season training plan.

Periodically, as Frank Zane does, you should cycle competitive or inseason training in your program. Here, you will use basically the same exercises, but will increase your reps and lighten your loads, and decrease the amount of rest between sets and exercises. Train with my cycle methods and you'll avoid injury and burnout, and be able to keep on your path to muscular greatness.

Here is a sample chart for you to follow when doing a training cycle:

OFF-SEASON - BASIC STRENGTH TRAINING

1) <u>SPLIT SYSTEM-First five months</u> Monday & Thursday

UPPER BODY

3-4 sets per exercise.

eight repetitions per set.

Wednesday & Saturday

LOWER BODY

3-4 sets per exercise.

eight repetitions per set.

2) POWER & BULK SYSTEM-Second five months

Same days as above, but use my pyramid system for 3-4 sets and 6-8 repetitions.

Basic Exercises

Basic Exercises

3) QUALITY OR IN-SEASON TRAINING-Last six weeks

- A. Increase to six training days per week.
- B. Work different bodyparts on different days.

Add

C. Three sets per exercise.

More

D. 12 repetitions per set.

- Exercise
- E. Rest less than one minute between all sets.

After Quality Training, take two weeks of total rest and repeat the entire training cycle.

A Cycling Method for a Non-Competitive Bodybuilder

If you are not a competitive bodybuilder but want to make the most of your workouts for years to come, I encourage you to follow this simple cycling routine:

- Put a variety of exercises in your program, since they will stimulate your nervous system, which in turn will stimulate your muscles.
- Keep tabs on the amount of weight you use and the number of repetitions and sets you do; when you see positive results start to level off, it's time to change your routine or introduce a light week.
- Generally, the most effective cycling method appears to be three weeks of heavy work, followed by a week of light work. The light week is needed for maximum supercompensation. This helps your body not only to recuperate better and avoid any possible training injuries from fatigue but also to grow strength and muscular mass fast

Use this cycling method only after you have completed your *Power and Bulk* routines - not before.

"To your innermost mind, where primal fears, hunger for power and raw instincts dwell there must you go to taste the sweetness of top sports performance. Combine that raw instinct to excel with the science of training and you open the door to physical prowess!"

CHAPTER 14 HOW TO MAKE UP YOUR OWN ROUTINES

have brought you through the first three months of training three times a week on your whole body. I have brought you through my special advance split system of training and finally my special bulk and power routine. You've seen how to incorporate all that into my cycle system of training. Now I will show you how to make up some bodybuilding routines using different forms of my split system.

You will be able to make up your own routines because you now have the maturity to understand and appreciate the Weider Instinctive Principle. My Instinctive Principle says that, ultimately, only you can be the master of your body and the training to make your body the way you want it! You must be creative and imaginative. You must be unique in your approach to maximize your gains. Different people respond to different programs, sets, reps and exercises. At some point, you will see that a particular routine may not be giving you the mass or power you want, or maybe a particular scheme of sets and reps doesn't seem to be giving you the shape you want. Also, during different periods of your training year, you will need to adjust your routine to gain mass. Then, later on, you might need to construct a new routine to improve your definition and shape. So, as you can see, the Weider Instinctive Principle is crucial to your understanding of how to develop and construct new routines. Here are some routine options for you:

ALTERNATIVE "A"			
Monday-Thursday Wednesday-Saturday			
1) Chest	1) Thighs		
2) Shoulders	2) Back		
3) Triceps	3) Biceps		
4) Forearms	4) Abdominals		
5) Calves			
6) Abdominals			

ALTERNATIVE "B"				
Monday-Thursday Wednesday-Saturday				
1) Abdominals	1) Abdominals			
2) Chest	2) Thighs			
3) Back (Upper)	3) Biceps			
4) Shoulders	4) Triceps			
5) Forearms	5) Lower Back			
	6) Calves			

After about a year of consistent dedicated workouts, you can graduate to using a five-day-a-week split routine, training Monday through Saturday with Wednesday and Sunday off. In this case, you will still divide your body into roughly equal halves, training the first half on Monday, Thursday, and Saturday, the other half on Tuesday and Friday. Then in the next week you should train the half that was worked only twice the first week on Monday, Thursday, and Saturday.

To illustrate how a five-day split routine works, here is a four week plan of the Split ('A" and "B" designate the two bodypart splits):

	Mond	lay Tuesda	y Thursda	ay Friday S	Saturday	
Week 1	Α	В	Α	В	Α	
Week 2	В	Α	В	Α	В	
Week 3	Α	В	Α	В	Α	
Week 4	В	Α	В	Α	В	

After another six months to a year of this style of hard training, you might be able to go up to a six-day split routine. You can determine whether such a routine is effective only by experimenting with the Weider Instinctive Training Principle. However, even a few of the top bodybuilders (Dennis Tinerino for one) have found that they make their best off-season gains training only four days per week.

If you intend to follow a six-day split routine, you should use one in which you train each major muscle group only twice per week. Here are two examples of the most popular six-day split routines:

ALTERNATE "A"

day Tuesday-Friday	Wednesday-Saturday
Abdominals	Abdominals
Back	Thighs
Biceps	Lower Back
Forearms	Forearms
Neck	Calves
	Abdominals Back Biceps Forearms

ALTERNATE "B"

Monday-Thurs	day Tuesday-Friday	Wednesday-Saturday
Abdominals	Abdominals	Abdominals
Chest	Shoulders	Thighs
Back	Biceps	Lower Back
Forearms	Triceps	Forearms
Calves	Neck	Calves

As you formulate your own personalized training program, try to keep within these off-season parameters for total sets per each muscle group:

	ARGE DYPARTS		
Beginner	6-8	(3 ex., 2-3	
		sets per ex.)	4-6
Intermediate	8-10		6-8
Advanced Bodybuilders	10-12		8-10

When you make up a training program for each muscle group, be sure you include at least one basic exercise. For example, an intermediate bodybuilder could do a chest routine comprising six sets of bench presses and four sets of incline dumbbell presses. Or for the biceps he could do three sets of barbell curls and three sets of incline dumbbell curls.

Be careful as you follow your individualized training program that you place exercises for your slower growing bodypart(s) at the beginning of your training schedule to take advantage of the Weider Muscle Priority Training Principle (see Chapter 28). Only then can you devote full physical and mental energies to blasting a lagging muscle group until it's in balance with the rest of your physique.

Remember, too, what I told you earlier: Do not spend all your valuable time running through different training routines. You should stay on one training routine until you cease to make progress on it! And do not attempt to follow a routine too advanced or complicated for your time schedule and personal maturity level. A final piece of advice: Always try to train in a "groove' fashion, using strict exercise form. Otherwise, working with heavy weights may lead to injury. But, occasionally, there is room for the Weider Cheating Training Principle (see Chapter 28) in the off-season to extend a set past the point of failure after doing at least 6-8 reps in strict form.

CHAPTER 15 IF YOU START TO GO STALE

Overtraining and Plateauing

As my student, I've brought you along slowly and safely, allowing your body to develop to its maximum. However, after training hard for a long period, you may notice that you don't seem to be responding as you did initially. Perhaps you aren't getting as good a pump from your workout or maybe you just feel tired and listless.

PLATEAUING

What you must understand is that there is a law of diminishing returns in bodybuilding. Let me explain. I remember, when I was about 13, the first time I measured my biceps it was 10'/2". After working out for a month, it measured 11'/2", a gain of a whole inch! At the time I figured I would keep adding an inch every month, and my arms would be as big as those of the champions before I was 14! Of course, what really happened is that my progress slowed down

There will be times where you seem to stagnate and your measurements remain the same. Actually, you will still be gaining in strength, tone and definition, but you just don't notice it. Your bodybuilding progress will seem to go up and down. Don't get frustrated by this.

Occasionally leveling off (called plateauing) is normal; by diligent efforts you'll work through it. It happens to everyone, including my greatest champions.

How should you handle stagnation in your development? One of my principles, the Weider Instinctive Principle, states that since everyone is different in terms of metabolism and the way he responds to exercise, each person must be able to tell if a particular program is working for him or causing him to be overtrained. Some of you will thrive on a threeday-a-week program and some of you won't make great gains until you go to my split system or my power- and bulk-building system.

You must be very careful that the routine you are on is not causing you to be overtrained.

The only way you'll realize what works best for you is to experiment with different workouts and degrees of intensity. In time, your physiological response will clearly indicate what's best for you.

Your workouts must be monitored so overtraining or burnout do not occur. You must look for subtle signs of overtraining. These signs include:

- Increased number of injures or muscle aches.
- An elevated resting pulse rate upon awakening.
- · A loss of interest in training.
- Irritability.
- Insomnia.
- · Loss of muscle size.
- · Headaches.
- Tiredness and lack of energy.
- Lessening of your sex drive.
- · Loss of appetite.
- Incomplete muscle recovery from one workout to the next.

This is experienced as reduced muscular performance characterized by 1) having to "cheat" the weight up; 2) having to use spotter assistance much more than before; 3) sloppy, uncontrolled form; 4) greatly reduced response in the muscle to intense exertion (inability to get a good pump); 5) reduced exertion capacity.

If any of these warning signs become evident, you must readjust your training program so you can work most productively, continually growing and improving. The wisdom of "listening to your body" now is obvious. You can gauge the effectiveness of your training routine by the degree of pump (blood engorgement in the muscle) that you get.

Now that you know the symptoms, what causes overtraining? Boredom and monotony (same exercises, reps and sets), overexertion from outside activities, worry, nervous exhaustion, lack of sleep, poor nutrition, pressure from competitors, too much caffeine, lack of diversion, training with too much weight, too much emphasis on forced repetitions and not taking in enough calories and energy-producing carbohydrates.

As my student, I want you to avoid overtraining. When the symptoms of overtraining become apparent I want you to take a layoff (no longer than a week or 10 days). Following this, changes in routine such as altering the days and hours you work out, changing the sets and reps you do and changing your pace of

training are good. Also effective are changing your training equipment and exercises, getting better sleep, increasing your carbohydrates, getting a good muscle massage, and thinking clear positive goal-directed thoughts.

Remember, you should *not always* try to train heavy on every exercise. Don't try to emulate the training programs of my champions until you're ready.

Do not be afraid to *occasionally* miss training; the world is not going to end if you do. Don't be discouraged if it takes time to pull out of an overtrained state.

Eat well. Stay with it. Follow my advice and listen to your body. Get a lot of rest and you will stay on your way to getting a muscular body.

"For ultimate size, shape and definition, practice my Holistic Principle, combining heavy training for mass with fewer (5-7) reps and higher (12-15) reps for quality."

CHAPTER 16 SAFETY TIPS

can assure you that bodybuilding is a very safe activity. But it's possible to injure yourself if you don't follow these rules:

- 1) Use Spotters. This is particularly important when you have entered the advanced stages of bodybuilding and are handling very heavy poundages in such exercises as the bench press and the squat. A spotter can help you by lifting a barbell off your body when you get stuck at the bottom of a movement.
- 2) Use catch racks if spotters aren't available. (All Weider Benches are equipped with these catch racks.)
- 3) Use collars on your barbell at all times.
- 4) Never hold your breath. Holding your breath can cause you to black out.
- 5) Maintain good gym housekeeping. It's easy to trip over loose weights.
- 6) Follow my instructions in this course carefully. Do not look for shortcuts!
- 7) Don't train in an overcrowded gym. 8) Always warm up thoroughly.
- 9) Use proper biomechanical positions m all exercises. I have given you these positions as I explained how to do each exercise earlier in this course.
- 10) Use a weightlifting belt when handling heavy weights.
- 11) Don't allow yourself to be goaded into trying more weight than you're capable of lifting.
- 12) Acquire as much knowledge as possible about weight training. One of the best ways to do this is to read MUSCLE & FITNESS, SHAPE, FLEX and MEN'S FITNESS each month.

TRAINING INJURIES:

Since bodybuilding is one of the safest sports, you won't have to worry about major injury, especially if you train as I've advised you through this course. Of course, if you train hard, you will periodically experience sore muscles, but this is normal, not pathological. If, however, a muscle gives you sharp, stabbing or aching pains that stay longer than usual, that's not normal and needs special attention.

Remember what I told you earlier in this course. If you train in a slow steady manner, using the proper form and groove for each exercise, and if you follow my special warm-up stretches and movements, you will suffer few, if any, injuries. In your quest for maximum strength and development, though, you may suffer an occasional injury. If you do, here is the procedure to follow to minimize the damage:

- 1) Immediately stop exercising.
- 2) Apply cold to the injured part (ice cubes wrapped in a towel or cold packs are best) to inhibit swelling.
- 3) Elevate the injured area. This also will minimize swelling.
- 4) If there is an open-skin abrasion produced, rinse the area with warm water, then apply ointment that's specifically for this purpose.
- 5) If you feel extreme pain or have twisted a joint, take the weight off the injured area by using crutches, and get to a doctor as soon as possible for X-rays.
- 6) If there is excessive bleeding, apply compression to the area, and likewise consult a doctor.

Most of the injuries in bodybuilding are minor, the pulled muscle variety. Sometimes what you think is a pulled muscle may simply be extreme muscle soreness or muscle spasms and will go away naturally in 24-48 hours. On the other hand, as my student, I don't want you playing doctor! Sometimes what you think is a muscle pull or tear might be a tendon or ligament injury. These types of injuries are more severe and take longer to heal. Whatever the case, the immediate treatment for these injuries(before you can see your doctor) is as I have explained here. After applying ice periodically for 15 minutes to the injured area for two or three days, you should then apply moist heat-not skin rubs-to the area 3-4 times a day. Also, you can take aspirin with vour meals to decrease the inflammation and take extra fuel nutrients to help nourish your body. You also will want to take enough time off to let the injury heal fully. When you start up again, begin with light weights and higher reps and proceed with caution for the first few workouts until you can resume normal training.

CHAPTER 17 SACK TIME

In the short term, to achieve your optimum rate of muscular growth, you must allow your body to recuperate between training sessions. The best way to do this is to give your body enough sleep and rest.

Individual sleep requirements vary between 6-10 hours a night. If you feel refreshed each morning, then you've probably gotten enough sleep the night before. Normally this will be about eight hours, but you may find that your batteries will be fully recharged each day if you take a short nap as well.

Muscle growth has to do with muscle-energy depletion. It takes time and rest for the energy in your muscles to be resupplied. Muscle fibers grow as a compensating response to the stress of bodybuilding that is placed on them. As you rest and resupply your body with necessary nutrients, this compensatory response takes place. When you water and feed a plant you don't notice any immediate changes, but pretty soon they appear. Your muscles grow in the same manner.

SLEEP AND REST

As mentioned above, your muscles grow during rest periods, and sleep plays an extremely important part in this growth process. Human growth hormone (hGH), which has a muscle building/fat reducing effect, is secreted in its greatest quantity during your first two hours of sleep.

Sleep is necessary for the rebuilding of muscle tissue severely stressed during your workout. Your body rebuilds, repairs and replenishes itself during sleep.

Studies indicate there are actually several stages (depths) of sleep, labeled Stages 1 through 4 (non-REM sleep) and REM sleep, or Rapid Eye Movement sleep-in which dreaming is thought to occur. Most of the beneficial (restorative, regenerative) effects of sleep occur during the deeper sleep periods (Stage 4 and REM sleep).

Research demonstrates that people deprived of these deeper sleep stages oversecrete catacholamine (stress) hormones while awake, thus greatly contributing to the negative effects of stress This condition can be devastating for your training, so I hope you can appreciate the need for high-quality sleep every night.

To promote restful slumber, do *not* train too closely to your bedtime. The stimulating effects of exercise will keep you alert and energized, quite the opposite sensations you should have before falling asleep.

Also helpful is the technique of calming your emotions before falling asleep. Here, you cleanse your mind of all negative, upsetting experiences that might have occurred during the day (sharp comments of others, mishaps, etc.). Release these harmful states of mind by realizing their degree of importance (usually *insignificant*) and then immediately link your thoughts with your aimpeace, harmony, success, victory! Establish new, productive states of mind by letting go of the negative past and then projecting and affirming the ideal you desire to experience. Keep your mental "success and musclebuilding videotape" rolling, and build up the feeling of confidence and accomplishment. A relaxed, positive state of mind will allow for easy sleep!

Sleeping well ensures energy replenishment and your feeling refreshed and enthused upon awakening! Remember: A good night's sleep is imperative to your going all-out in your workouts.

So sleep and rest are just as important for the growth process in your body as the bodybuilding exercises are. Remember how important I said your mind is to your success? This is another reason you need good sleep. You need a lot of rest so your mind can develop the enthusiasm so critical for success.

CHAPTER 18 STAYING MOTIVATED

By now you know that my system presents the most comprehensive and organized set of training principles and routines ever devised in bodybuilding. These techniques used by our great champions for the past 45 years are proof enough that by following them faithfully you will achieve your goal. However, I want you to understand this fact: Putting my system to work not only requires physical effort, but also mental concentration and staying psyched, so that you can achieve your goals faster than you ever thought possible.

Better than anyone else, I know how the powers of the mind can exert either a positive or negative influence on your bodybuilding progress. Unless you apply your mental powers, your gains using my system will be diminished. Your attitude will decide how far you progress in bodybuilding. You must make your mind work for you if you want longevity and ultimate gains.

Successful bodybuilders are intelligent bodybuilders. Intelligence in bodybuilding has nothing to do with your 10 or school grades. Rather, intelligence means concentrating during workouts, channeling mental energies efficiently, knowing how to stay motivated, purposefully approaching each training session, being sensitive to your body needs and maintaining a positive attitude. Just as putting in quality reps and sets requires great physical effort, putting in quality workouts requires mental concentration. This section will present some of the major psychological issues necessary to stay psyched in your bodybuilding so that you can better use my techniques in reaching your goals faster.

MOTIVATION

The question my champions ask me most frequently pertains to the mental aspects of bodybuilding and how they can increase motivation.

To begin with, you must understand that there is a big difference between becoming motivated and *staying* motivated. Becoming motivated is easy. Almost any kind of outside stimulus can get you motivated. You get psyched when you watch a bodybuilding contest, see someone really putting out in the gym, or when you read MUSCLE & FITNESS and FLEX each month. The real challenge is learning how to stay motivated, especially when these positive outside stimuli are not around.

Internal motivation is that energy which directs and sustains you. It emanates from your bodybuilding goals, dreams, desires, dedication, courage, persistence, needs, wants and willpower. Your training has to *mean* something to you or you will never be

able to sustain your motivation. It has to fulfill you and strengthen the essence of your identity.

As you better understand your bodybuilding motives, you will begin to gain a better sense of the meaning and purpose of your training. You will then discover that you can extend your workout intensity! From this foundation, you can start constructing your specific bodybuilding goals and plans.

HOW TO TAKE MEASUREMENTS

You should measure your bodyparts when your muscles are cold, not after they've been exercised. Take the measurements soon after you awake in the morning, always at the same time and always measuring the same area, usually the middle of the muscle. Do not pull the measuring tape too tight or let it hang loose. You must be meticulous so that your measurements are always accurate.

Use a fabric tape, making your measurements to the nearest oneeighth inch at the points illustrated in the photographs. It's important that you pass the tape perpendicular to the bony framework around the part being measured. In other words, go straight around, not diagonally.

Finally, it's a good idea to check your tape occasionally against a metal tape or ruler to see that it hasn't shrunk or stretched.

GOALS AND PLANS

There's an old saying, "If you don't know where you're going, you'll wind up somplace else:" Establishing goals and making specific plans to reach those goals are essential for staying psyched in your bodybuilding. Without them you will flounder.

There are some bodybuilders around today who still believe that goal setting and planning are a waste of time. So they hit the iron, but aimlessly bounce around from one unrelated exercise to another. And then they wonder why they are always injured and cannot sustain any training intensity, or they discover that they're grossly disproporfioned.

Establishing your bodybuilding goals gives you a road map with a destination. Forming specific plans gives the course to reach your goals. When you have this road map and this course, all the pieces of your bodybuilding puzzle fall into place.

TYPES OF GOALS

My serious students, and I hope you are one of them, should know that you can't train intensely all the time, so they break up each year into three or four monthly cycles. Each cycle may emphasize a different phase of bodybuilding such as building strength and mass, definition and symmetry, or recuperating and doing more aerobic activities.

All top bodybuilders will enter the gym for a workout only after they have established their specific goals for that session. Setting little goals during the workout can also provide the extra impetus to extend yourself. When you tell yourself, "Okay, three more reps;" or "I've got to feel that pump;" or "Let's see just how far I can push

myself today;" you are keeping your mind focused and will be better able to maximize each training session.

HOW TO SET GOALS AND PLANS

No matter what kind of goals you establish (that is, long-term goals or goals for a particular workout), make them as specific as possible. Structure your goals so that they are *appropriate* and *attainable*. Whenever you structure your goals and plans on an all-or-nothing basis, most often the results will be nothing. Appropriateness keeps your goals realistic and relevant. Attainability provides you with the incentives, rewards and momentum to continue.

Monitor your progress so that you can alter your goals. The best way to do this is to maintain an accurate training log. From this information you can more clearly see your progress as well as establish even more appropriate and attainable goals and plans for future workouts.

Clearly defined bodybuilding motives lead to more clearly defined goals and plans. However, all of these things hinge on your bodybuilding attitudes.

POSITIVE ATTITUDE

Without exception, every successful bodybuilder possesses the quality of a positive attitude (PA). They know that in every situation they face, in training or in the rest of their lives, they can only approach it in one of two ways: positively or negatively.

I have always told my great champions, "You become what you

"Depend upon your own inspiration to succeed. Look for it not outside yourself but within."

think about." If you are constantly negative and tear yourself down, your mind and body will eventually suffer. On the other hand, if you are continually realistically positive and expect the best, as my great champions are, your mind and body will eventually profit.

So trust and believe in yourself just as I trust and believe in you. Especially when there is doubt, discouragement or fear, believe in yourself. Believe you can. And you will. It is as simple as that. Others have risen from weakness and poor self-image to veritable greatness, winning great events, becoming superstars. You can too!

Part of staying positive is surrounding yourself with genuinely positive, dedicated and supportive people. Motivation and intensity can quickly be clouded and eroded by negative, sarcastic, overly competitive, inconsiderate, jealous, fearful people. My successful students have learned that excuses, lies, sarcasm and fears have no place in a strong success-directed attitude. Being positive means being positive all the time.

Bodybuilding has one of the most direct mind-body links of any sport or activity. What goes on in the mind directly influences the body and vice versa. It is a dynamic relationship that you can-and must-control and direct. Bodybuilding presents a unique

opportunity to maximize your mind power as well as your body power. It is by being aware and utilizing your motivation, goals and attitude that you will be able to stay psyched in your bodybuilding. By doing all of these things you will eventually become the you of your dreams! You will get the well-developed, powerful body you want and be on your way to championship status.

CHAPTER 19 KNOW THYSELF

A wise philosopher once remarked, "Know thyself:" Unfortunately, this is much easier said than done. If you are to be successful down the long road to physical excellence, you must learn to understand yourself. This means not only must you be keenly aware of your energy levels and enthusiasm from day to day, but you also must be aware of your mood and temperament from day to day. In fact, your ability to appreciate and adjust to your mental state is just as important as your ability to accommodate to your physical energies. This is essentially the basis of the time-honored Weider Instinctive Principle.

When you get into advanced training, you will see that the power of your mind is as important as the power of your biceps in creating the ultimate you! In fact, there's an old saying in bodybuilding circles: "The mind always fails before the body." If you ignore the role of self-awareness in your training, your mind will fail fast! Previously I told you how to adjust your training to your strength levels and physical energies from workout to workout. As an inexperienced bodybuilder, you will find that your temperament will have less influence on your training progress than your physical energies. This is because the novelty of bodybuilding keeps your enthusiasm high, and you'll want to train regularly.

However, the more advanced you become, the more your body will resist change and grow slowly. You must, therefore, be even more self-motivated to make gains. At this point, once the initial training impetus has lessened, attention to temperament and individual psychology becomes vital.

As I've said, no two bodybuilding stars train exactly the same. Each has his private likes and dislikes. It's only by understanding himself that each overcomes temperament shortcomings and takes advantage of psychological potential.

THE TORTOISE AND THE HARE

Remember their race? The tortoise was slow and determined, the rabbit fast and unreliable. Analogous examples of temperament are found among the champion bodybuilders.

Arnold Schwarzenegger, although he might appear loose and relaxed in the gym, is actually a determined, serious and tenacious individual. Once he decides upon a course of action, he sticks to it with bulldog stubbornness. His temperament is a 'fixed pattern:' He makes no snap judgments, weighs everything carefully far in

advance of an event and then-once he has made up his mind-it is practically impossible to sway him.

This steadfastness is reflected in his training. He thrives on a program of a few exercises. He performs 4-5 sets of each one, plodding through his workout with maximum weights, gritting his teeth and fighting for that last fruitful rep of each set.

Arnold has a fixed pattern. He knows exactly in what order his exercises are going to be performed, exactly what weights he'll use, exactly the number of sets and reps. If some outside influence interrupts Arnold's normal pattern, his workout is unsuccessful. Like that of the tortoise, Arnold's temperament is best described as one of *premeditated determination*.

Lou Ferrigno is exactly the opposite. Impulsive and less serious than Arnold about his training, Lou thrives on variety. He detests monotony. This can be seen in his bodybuilding and professional career. One day he is Mr Universe. The next day he forgets serious workouts and is seeking a movie career. Every day is new and different. Louie takes things as they come.

His training reflects his temperament. He doesn't perform deliberate sets like Arnold. He'd be bored on 4-5 sets of just a few exercises, month after month. Lou needs variety, so he performs three sets each of 5-6 different exercises for a bodypart. For his arms he'll do a barbell curl, a concentration curl, a preacher curl, an incline curl and so on. In the end he has done the same number of sets as Arnold, but his workouts will be more varied.

Mr. Universe, Ken Waller, is not lazy, but he's phlegmatic. He finds it hard to get worked up into a high mental pitch. His training career is filled with layoffs. If there is no pressing issue such as a big competition in which he intends to compete, Ken prefers to take life easy.

When he's prodded into action, however, Ken's workouts are more intense than those of most champions. Once aroused, he makes up for lost time, packing six months of training into two or three. And because of his particular temperament and physical makeup, Ken Waller thrives on such a schedule.

You most likely belong to one of the above styles. Knowing your temperament and using the Weider Instinctive Training Principle, you can find the key to planning your training.

Less commonly, there is also the fulfilled athlete, the one who is always confident of the future. Success generally comes naturally to such people, for they never think about failure. They expect success! Their major difficulty is staying with one activity long enough to realize their ultimate potential. Corinna Everson, a Ms. Olympia winner, is like this. If these people choose, they can be worldbeaters.

Another specific type of training temperament is the defeatist. These people complain that whatever they touch turns sour Such an attitude can destroy bodybuilding success. Defeatists need inspiration. They should look over the articles in my magazine, read the inspiring stories of champion bodybuilders, and then make up their minds that they are no different from anyone else and can also succeed!

Another temperament is the gullible type. These people swallow everything they're told hook, line and sinker. When the recommended approach fails to bring results, they become

confused, jump from one program to another and fail to make progress. This type of bodybuilder must follow authoritative advice such as in this course. Past this, they need to examine the facts to be sure they're applicable. Success *will* come much faster this way, and they'll be less disappointed and confused.

The opposite of the above type is the skeptic. These people believe in bodybuilding, but are seldom sold on new and improved methods. Their adage is, "What was good enough for my grandparents is good enough for me." Such individuals should carefully examine all the facts, study the proofs supporting them, and then-if the various points appear to stand upincorporate them in their program. An *open* mind is essential for progress.

From the foregoing, you can see that each individual Welder student should study his temperament and then adjust his training to best fit it. When you do this, you will forge ahead at an unprecedented rate. Only when you have mastered the Weider Instinctive Principle and combined this with routines that match your temperament will you be able to create personal routines that will help you get the most out of your workouts. You must find out what works best for you!

LAYOFFS

Periodically-perhaps twice a year or once every three months-you may need a rest from training. It's okay to take these layoffs, but be careful not to overeat or otherwise overindulge yourself. This is a time to relax and lay new plans and goals so that when you resume your workouts, you will be refreshed and raring to go. If you want to make optimum progress, don't allow one of these layoffs to last more than two weeks.

When you resume training, take it easy for the first workout or two. Jumping right back into a heavy schedule is bound to result in severe soreness and possibly injuries.

"Allow at least six months of consistent, scientific training to develop a sound base of strength and fitness. Specialized training for slower developing muscles before a foundation is laid can result in uneven development and a pattern of neglect in certain muscle groups."

CHAPTER 20 WEIGHT TRAINING MACHINES

Since you've begun bodybuilding, you might have noted the highpressure advertising of certain gyms that feature weighttraining machines instead of free weights. Many of these gyms make the unsubstantiated claim that you can achieve optimum muscle mass and physical conditioning with only three 20-minute workouts on their machines each week.

I have nothing against weight-training machines. In combination with barbells, cable-pulley apparatus and dumbbells, they can be valuable pieces of equipment to a bodybuilder. In fact, my great champions use them to help develop isolated muscle groups in shaping their overall muscularity. However, I want you to realize that machines alone will not build muscle mass and great strength. If you use them without free weights and aerobic exercises, the progress you will make with machines will be negligible.

Machines are extremely expensive. Some of them offer a minimum of exercises for each muscle group. This is a sure route to total boredom. Machines can never match barbells, pulleys and dumbbells because you can't get the angles on them. By this I mean that on a machine you are limited to a very specific pattern of motion that prevents total development. With free weights and free cable apparatus the opposite is true. You have to balance weights. This calls many more muscles into play. With weights and dumbbells, you can work your muscles from a variety of different angles with a variety of different exercises, with a variety of different speeds, shaping, strengthening the muscle group just as you want it. There isn't *one* major bodybuilding champion in the world today who has built his physique by machines alone despite misleading advertising ploys which may indicate the contrary.

CHAPTER 21 BODYBUILDING FOR OTHER SPORTS

Maybe your ambition changes as you get stronger and you would like to turn to other sports. Your question will naturally be: Can the Joe Weider Bodybuilding System help me to become a successful athlete? The answer is Yes! First, you should know the numerous factors that must be present for you to be a champion athlete: speed, strength, skill, dexterity, courage, intelligence, endurance, leverage, flexibility and psychological preparedness. Of all these qualities, strength is the most easily increased. My course will improve your chances of becoming a successful athlete by increasing your *strength and* power!

ATHLETIC CYCLE TRAINING

Traditionally, weight training for athletes took place in the off-season. However, athletes notice that they are stronger and suffer fewer injuries at the beginning of the season than at the end. So most athletes have adopted year-round weight training. During the season you should reduce both the volume and intensity of your bodybuilding, and you must work closely with your coach!

Obviously it would be foolish to train with the same intensity during the competitive season as in the off-season. Generally you should train for strength and power in the off-season, and then try to maintain that strength as much as you can during the competitive season.

The Weider Research Group has established that competitive athletes should follow these three basic cycles of weight training during their noncompetitive season. (Work with your coach during the season.)

Phase	Duration	Workouts/Week
1) Conditioning	4-6 weeks	3
2) Strength	8-10 weeks	3-5
3) Power	6-8 weeks	3

In the off-season you should begin your cycle with Phase 1, then alternate Phases 2 and 3 for the rest of your off-season cycle.

Phase 1 -Conditioning

Conditioning prepares your body for the heavier training to follow. During the conditioning phase you can do the same exercises, but use less weight, higher reps and less rest time between sets!

Phase 2 - Strength

These routines should give you a great deal of strength that will translate into improved athletic performance when you learn the necessary sports skills through which your new strength will be channeled.

Phase 3 - Power

Power is the combination of strength and speed. To acquire power you need to use heavy weights for sets of 4-8 reps. You should try to move the weights as quickly and explosively as possible with each rep, even though they will move slowly because you are using heavy weights.

As an all-round example, here is a good *power-building* routine.

Exercise	Sets	Reps
1) Sit-Ups	2-3	20-30
2) Leg Raises	2-3	20-30
3) Squats	4	5-6
4) Leg Curls	3	6-8
5) Deadlifts (perform once a week)	3	4-6
6) Barbell Bent Rowing	4	6-8
7) Barbell Shrugs	3	8-10
8) Bent-Arm Pullovers	3	4-6
9) Bench Presses	4	6-8
10) Military Presses	3-4	4-6
11) Lying Triceps Extensions	3	6-8
12) Barbell Curls	3	6-8
13) Barbell Wrist Curls	3	10-15
14) Standing Calf Raises	4	8-12

By following these bodybuilding cycles religiously for a yearalternating the three cycles discussed at the beginning of this chapter-you will find yourself in much better shape. To reiterate-bodybuilding is great for improving strength and hence for improving athletic performance. Your chances of becoming a successful athlete are greatly increased by following these three training cycles!

I have outlined here several sample strength bodybuilding programs that you can follow for a few different sports. Strengthbuilding comprises the major portion of your off-season bodybuilding athletic training. As I mentioned earlier, during your conditioning phase you may do the same exercises but just do higher reps with lighter weights-get your workout done faster so you develop condition! In the power phase, you will very seldom do more than eight reps since you want pure power Lower repetitions build power and strength, which translates into increased athletic speed. Again you can do the same programs I outline here, but just keep your repetitions between four and eight.

1. BODYBUILDING FOR BASKETBALL

3 Days Per Week MON., WED., FRI. or TUES., THURS. and SAT.

SETS	REPS
1 2	8 warm-up 10
3	6
3	6-8
3	8
2	10
3	8-10
3	10
4	10
4	10
3	15
2	25 each way
2	30
	1 2 3 3 3 2 3 3 4 4 3 3 2 2

2. BODYBUILDING FOR BOXING

3 Days Per Week MON., WED., FRI. or TUES., THURS. and SAT

Stretching and Warm-Up Exercises EXERCISE	SETS	REPS
A) Bench Presses	3	8

B) Military Presses	3	10	
C) Upright Rows	2	10	
D) Lateral Raises	2	15	
E) Bent-Over Rows	2	12	
F) Squats	3	20	
G) Leg Extensions with Iron Boot	3	15	
H) Leg Curls with Iron Boot	3	15	
I) Standing Calf Raises	2	20	
J) Reverse Curls	2	25	
K) Weighted Sit-Ups	3	12	
L) Side Bends with Dumbbells	2	20	
M) Shrugs	3	12	
·	,		

Stretch-Out and Cool-Down Exercises

3. BODYBUILDING ROUTINE FOR FOOTBALL: OFFENSIVE AND DEFENSIVE BACKS

3 Days Per Week MON., WED., FRI. or TUES., THURS. and SAT.

Warm-Up Exercises and Stretching EXERCISE	SETS	REPS
A) Bench Presses	2	8
B) Seated Behind-the-Neck Presses	3	3-8
C) Upright Rows	3	8
D) Shrugs	3	12
E) Triceps Extensions	3	8
F) Bent-Over Rows	3	6
G) Curls	3	8
H) Squats	4	6-8
1) Leg Extensions with Iron Boot	3	12
J) Leg Curls with Iron Boot	2	12
K) Standing Calf Raises	3	12
L) Deadlifts	4	6-8
M) Sit-Ups-and Leg Raises	2	30 each
Flexibility and Cool-Down Exercises		

" In sports, where athletes strive to achieve peak performance capabilities, weight training has proven itself time and time again to be the fastest, most versatile vehicle to get them there."



4. BODYBUILDING ROUTINE FOR FOOTBALL: **OFFENSIVE AND DEFENSIVE LINEMEN**

Defense: (3 days upper body 2 days lower body) split system. Offense: (2 days upper body, 3 days lower body) split system.

UPPER BODY	U	P	Ρ	Ε	R	В	0	D	Υ
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Warm-Up Exercises and Stretching EXERCISE	SETS	REPS
A) Bench Presses	2 4 4 5	8 warm-up 6-1st day (M) 10-2nd day (W) 5-3rd day (F)
B) Bent-over Barbell Rows	3	8-10
C) Triceps Extensions	3	8
D) Seated Behind-the-Neck Presses	4	5
E) Lateral Dumbbell Raises	3	10
F) Barbell Curls	3	8
G) Bent-Arm Pullovers	3	8

3

30

Stretch-Out and Cool-Down Exercises

LOWER BODY

H) Sit-Ups

Warm-Up Exercises and Stretching EXERCISE		SETS	REPS
A) Squats		2	6 warm-ups
		4	6-1st day (T
		4	10-2nd day (Th.)
B) Dead	llifts	3	10
C & D)	Leg Extensions and		
•	Leg Curls with Iron Boot	3	12 each exercise
E) Sit-U	ps	3	30
F) Shrug	gs	3	12
Stretch-	Out and Cool-Down Exercises		
* B) Power Cleans (Every other workout you should substitute power cleans for deadlifts.)		4	5

5. IN-SEASON BODYBUILDING FOR FOOTBALL

SETS	REPS
3	8
1	8 warm-up
3	8
3	10
3	10
	3 1 3

E) Sit-Ups	3	20	
Stretch-Out and Cool-Down Exercise	s		

6. BODYBUILDING FOR TRACK: **SPRINTERS - HURDLERS - JUMPERS**

3 Days Per Week

MON., WED., FRI. or TUES., THURS. and SAT

Stretching and Warm-Up Exercises		
EXERCISE	SETS	REPS
A) Squats	2	8 warm-up
B) Leg Extensions with Iron Boot	3	12
C) Leg Curls with Iron Boot	3	12
D) Military Presses	4	6
E) Deadlifts	3	10
F) Sit-Ups	3	20
G) Calf Raises	2-3	10
Stretch-Out and Cool-Down Exercises		

Stretch-Out and Cool-Down Exercises

7. BODYBUILDING FOR BASEBALL

3 Days Per Week

MON., WED. FRI. or TUES., THURS. and SAT

SETS	REPS
3	10
3	8-10
3	8-10
2	12
2	12
2	12
2	25
2	25
3	25
2	10
2	10
2	20
	3 3 2 2 2 2 2 2 2 2 2 2 2

Stretch-Out and Cool-Down Exercises

"To avoid soreness, start your workouts slow and easy, gradually building up intensity."



8. BODYBUILDING FOR WRESTLING

3 Days Per Week MON., WED., FRI. or TUES., THURS. and SAT.

Stretching and Warm-Up Exercises EXERCISE	SETS	REPS
A) Bent-Over Rows	4	8
B) Chin-Ups		As many as possible
C) Military Presses	3	8
D) Bench Presses	1 3	8 warm-up 8-10
E) Triceps Extensions	3	10-12
F) Upright Rows	4	8
G) Squats	3	8
H) Barbell Curls	3	8
I) Sit-Ups	5	25
J) Shrugs	3	15
Stretch-Out and Cool-Down Exercises		

9. BODYBUILDING FOR SWIMMING

3 Days Per Week MON., WED., FRI. or TUES., THURS. and SAT.

Warm Up by Stretching and Calisthenics					
EXERCISE	SETS	REPS			
A) Pullover Exercises, Bent or Straight Arm	3	12			
B) Bent-Over Rows	3	8-12			
C) Upright Rows	3	8-12			
D) Triceps Extensions	3	10			
E) Bench Presses	3	8-12			
F) Dumbbell Flyes	3	8-12			
G) Leg Extensions with Iron Boot	3	12			
H) Leg Curls with Iron Boot	3	12			
I) Regular Sit-Ups	3	25			
Stretch-Out and Cool-Down Exercise	20				

Stretch-Out and Cool-Down Exercises

10. BODYBUILDING FOR TRACK: THROWERS

3 Days Per Week MON., WED., FRI. or TUES., THURS. and SAT

Stretching and Warm-Up Exercises
EXERCISE SETS REPS

A) Bench Presses	2	8 warm-up
B) Military Presses	3	6
C) Lateral Raises with Dumbbells	4	8
D) Bent-Over Rows	3	6-8
E) Triceps Extensions	3	6-8
F) Squats (Power Cleans every third session instead of Squats	2 4	4 warm-up 5
G) Leg Extensions with Iron Boot	3	12
H) Leg Curls with Iron Boot	3	12
I) Sit-Ups with Weight	3	20
J) Palms-Up Wrist Curls	3	20

11. BODYBUILDING FOR THE MARTIAL ARTS

3 Days Per Week MON., WED., FRI. or TUES., THURS. and SAT.

Warm-Up and Stretching Exercises		
EXERCISE	SETS	REPS
A) Bench Presses	3	8-12
B) Military Presses	3	12
C) Bent-Over Rows	3	8
D) Bent-Arm Pullovers	2	8-12
E) Lateral Raises	2	8-12
F) Upright Rows	2	15
G) Barbell Curls	2	12
H) Squats	3	10
I) Leg Extensions with Iron Boot	2	12
J) Leg Curls with Iron Boot	2	12
K) Sit-Ups	4	15-20

Very important to Stretch before and after training! . . . also to do Cool Down Exercises

Don't ever forget my cardinal rules for success - train hard, eat wisely, sleep well and live right!"

CHAPTER 22 WOMEN AND THE IRON SPORT In the late Seventies, when I began to promote women's bodybuilding, women came to realize that bodybuilding is the best way to get rid of unwanted bodyfat, tone and shape up muscles and develop strength. Many women who have started bodybuilding after childbirth or just because they wanted to get into shape have found that their response to training was so good that they decided to enter competition. Nowadays, we have great women champions like Carla Dunlap, Rachel McLish and Corinna Everson representing the ideal physical stature a woman can achieve through my bodybuilding system. My magazine SHAPE is very popular worldwide and the large majority of its readers are women.

Since women are relatively new to bodybuilding and most of them are not accustomed to strenuous daily activities, they must spend a little more time getting used to the exercises. If, through your training, you get a bit sore, it's nothing to worry about, as it will clear up as you train more.

How are women different from men? Women's bodies have smaller joints, which means smaller tendons and ligaments, too. Therefore, you women cannot expect to train with as much weight, but you can do the same exercises.

Women have proportionately larger and broader pelvic structures than men. Wider hips give women better balance and a lower center of gravity. This has little bearing on actual training although women usually do have better flexibility than men and therefore can exercise their muscles through a greater range of motion. Women's lower bodies are proportionately bigger and stronger than their upper bodies. Men have larger shoulder girdles relative to their lower bodies, whereas with women it's just the opposite. Naturally, then, women tend to gain strength and size faster in the lower body than in the upper body. Still, you women should do the same exercises as men!

One point, though, women should be careful about doing the Olympic lifts with the upper body. Since women have smaller shoulder and elbow joints, you should be cautious about placing too much strain there. Bodybuilders don't need to do Olympic lifts anyway.

Women carry more fat than men. The average female competing bodybuilder is 10-16% bodyfat in contest shape. Women have more fat surrounding and disbursed through some of their reproductive organs. This is called essential fat. Women tend to store more fat in their legs, which makes it more difficult for them to muscularize their legs. When you train, keep this in mind. To maximize your leg muscularity, do a lot of different exercises, using lighter weights, doing higher repetitions in combination with a good low-fat nutrition program.

Women respond to bodybuilding just as men do, by getting stronger and losing bodyfat. Only it's to a lesser degree. Men develop more muscle size because they have different hormones. Bodybuilding is the ideal sport for women. Bodybuilding is anything you make it. You can train for strength and power or to tone up and lose bodyfat, or you can train for competition.

Women should train just as the men do-just as hard and just as long each workout. Bodybuilding is custom-made for beautifying

and shaping the body. You women can build graceful symmetry, strength, proportion, vitality and health and stay fit for the rest of your lives. A good example is my wife Betty. Forget training differences with men. Start bodybuilding and change your life - for good!

"To be a top champion requires good genes, but every man, woman and child - no matter how `bad' their genetics - can still improve their physiques 100%."

CHAPTER 23 WHAT GOES INTO A CHAMPION'S BODY

cannot stress too strongly how important good nutrition is for your overall success with my course. Indeed, a good diet is at least 50% of your success in becoming a bodybuilding champion! Good nutrition is vital for energy, health and certainly for building muscle!

Protein is necessary for lean muscle tissue. I suggest that your daily food consumption be made up of about 25-30% protein, 55-60% carbohydrates and the rest of necessary fats. Protein is needed to repair damaged muscle cells and is instrumental in tissue growth. The best sources of protein are fish, chicken, lean meats, turkey, nonfat milk, egg whites, nuts, soy and whey products and various vegetables.

Carbohydrates are the main source of training energy for a bodybuilder. They are also necessary for the complete utilization of protein by your body. Some good sources of carbohydrates are whole-wheat pasta, whole-wheat breads, noodles, fruits, vegetables, legumes, seeds, nuts and low-fat dairy products.

Certain fats are vital for the function of the human body. Fats serve as carriers of fat-soluble vitamins in your blood, as body insulators and protectors of vital organs and also provide energy for basal metabolism and sustained activity. Specific fatty acids are essential components of our cells. Most foods contain the fats necessary to the human body. Good sources are dairy products, plant and fish oils, cheeses and yogurt.

Besides fats, proteins and carbohydrates, you also need vitamins and minerals and plenty of fresh water.

Vitamins and Minerals: Vitamins and minerals are necessary micronutrients in almost every energy and digestive reaction in human metabolism. They are vital for fighting off disease and maintaining good health. Fruits and vegetables are excellent sources of vitamins and minerals.

Water: Since the human body is close to 80% water, it's necessary to provide your body with an adequate supply of water daily. Needless to say, water is a part of every metabolic reaction in your body too. It's even more important than food! You can survive a long time without food, but only a few days without water.

Protein: The amount of protein you consume, however, can vary widely. Some bodybuilders eat as little as 80-100 grams of protein daily year-round, and they still gain muscle mass. Other bodybuilders consume 150-200 grams per day.

As long as you get it from first-class sources, I suggest that you eat around one gram of protein per pound of bodyweight daily. Complete protein from animal sources (meat, fish, poultry, eggs and milk products), has a good balance of the essential amino acids.

There are 22 amino acids in the protein in human muscle tissue, eight of which cannot be synthesized in the body. These eight amino acids are termed essential and must be provided from your diet. Vegetable proteins lack either one or more essential amino acids, or have very low levels so that you must combine your vegetable protein sources carefully to maximize their yield.

To consume high levels of protein and make it available for assimilation into muscle tissue. I suggest you eat four or five small highprotein meals per day consisting of about 30 grams of protein each. Use low-fat sources for your protein.

One of the problems in the past with eating such massive amounts of protein is that bodybuilders ate primarily beef, eggs and milk products. These types of protein have large amounts of fat.

On a low-fat diet, you will have to consume your protein from low-fat sources. Here is a table of protein foods that you should and shouldn't eat, in terms of their fat content:

Do Eat	Do Not Eat
Fish	Beef
Poultry (white meat)	Pork
Egg Whites	Egg Yolks
Vegetables	

in general, pork is higher in saturated fat than beef, beef is higher than poultry, and poultry is higher than fish. Therefore, when you're on a lowfat diet, it's much better to eat poultry than beef. Incidentally, you should always remove the fatty skin from poultry before cooking it, and all animal-flesh protein foods should be broiled. Never fry foods!

CARBOHYDRATES AND FATS:

You'll need to consume plenty of carbohydrates to supply energy for your workouts. There are three types of carbohydrate food. The first is refined carbohydrates, mostly sugar and chemical additivesjunk food. Eating more than one junk-food item per day is excessive.

Simple carbohydrates (mainly fruits) come next. They're excellent for giving the body energy. The fructose is readily converted into glucose.

The third type, the "large" complexed slow-burning carbohydrate, is found in vegetables, grains, legumes, seeds and nuts. They will give you a steady flow of energy for your workouts. These are the

type of carbohydrates Tom Platz and Corinna Everson eat, and they helped these two superstars build unprecedented physiques.

THE FOOD GROUPS:

When planning your meals, make sure that you include foods from the four basic food groups each and every day! The US Department of Agriculture has devised a diet that includes the recommended daily allowance of each of the important nutrients. The four groupings per day are:

- 1) Fruits and Vegetables. Fresh fruits and vegetables are the best source of carbohydrates, as well as vitamins, minerals and enzymes. They also contain fiber, which your body needs for digestion. However, while the amount of protein in fruits is negligible, vegetarians have demonstrated that you can get all the protein your body requires by eating foods from multiple vegetable sources. It is difficult to consume enough protein from vegetable sources, however, so most bodybuilders prefer to include lowfat meats (such as fish and poultry), egg whites and low-fat milk products in their diets, as well as fruits and vegetables.
- 2) Cereals and Grains. Foods like breads, cereals, grains, flour and assorted baked goods are made of carbohydrates-providing proteins, vitamins and minerals. Western civilization developed on a foundation of cereals and grains. These people were originally hunters and gatherers before becoming an agrarian society and then an industrial society.
- **3) High-Protein Foods.** Meats, poultry, fish and eggs provide "complete protein," which has all the amino acids your body needs to manufacture new tissue. But some of these foods also contain substantial quantities of fat, which adds to their caloric content. Therefore, many bodybuilders limit the amount of red meat in their diets, substituting skinned chicken breasts (the skin of all poultry is very high in fat) and fish instead.
- **4) Milk and Dairy Products.** Dairy products (milk, cheese, eggs, yogurt, etc.) provide a rich source of protein, calcium and riboflavin. Some individuals, however, can't digest milk sugar. These people must avoid milk, but may still enjoy cheeses, yogurt and other dairy products that contain less lactose. For those able to drink milk, nonfat milk provides all the nutrition of whole milk without the extra fat calories and without all the cholesterol. You shouldn't consume a lot of eggs either, because they're so high in cholesterol.

Using the foregoing dietary suggestions, here is a sample meal plan adjustable according to body size and food preferences:

Meal One (8 a.m.): Two poached eggs, bran cereal with nonfat milk and a teaspoon of honey, supplements.

Meal Two (noon): Tuna salad or broiled chicken, salad, baked potato, tea or coffee, supplements.

Meal Three (5-6 p.m.): Broiled fish, brown rice, raw vegetables, glass of nonfat milk, supplements.

Meal Four (g p.m.): Protein drink (two tablespoons of protein powder, 812 oz. of nonfat milk, fruit to taste).

As a bodybuilder, you will want to keep total fat and saturated fat intakes very low. Try to eliminate (or keep to a minimum) the following foods: whole milk, creamy salad dressings, butter, French fries, pastries, chocolate, ice cream, fatty steaks, luncheon meats, mayonnaise, fatty cheese spreads and peanut butter.

Remember, the heavy workouts you perform require high energy levels, so you should adjust your calories accordingly. This usually requires a diet *high* in calories, but be careful that you don't eat too much. Male bodybuilders should stay within 8-12 pounds of their ideal competition weight, women, 5-8 pounds.

Excess bodyfat makes it difficult to reach championship condition, and it makes your appearance far from an endorsement for bodybuilding. Excessive bodyfat also weighs you down and decreases your energy levels. Have you ever tried to carry a 30-pound dumbbell around all dad That's what it's like to be 30 pounds overweight!

VITAMINS, MINERALS AND WATER:

Vitamins and Minerals. No two people in the world have the same fingerprints. You are all different. The same applies to your biochemistry and lifestyle. Therefore it is impossible to determine the amount of vitamins and minerals each individual requires.

It is a known fact that stress depletes the body of vitamins and minerals. Arguments, hard work, pregnancy, sickness, heavy training, school work and sports participation are all stresses. Therefore to ensure that you receive the nutrients you require, a combination of intelligent nutritional habits and vitamin and mineral supplementation is vital. (Not only vital for the athlete, but for the average individual who wants to enjoy optimal health, too!)

Our grandparents did not have to be so concerned with the chemicals and poisons that exist around us today. Drugs were not prevalent in society in their time, and cigarette smoking was minimal. Today, with the introduction of these negative factors, the body is bombarded with chemicals that have to be broken down and dispersed. These chemicals oxidize in the body, causing health problems. Vitamins A, C and E and the mineral selenium are excellent antioxidants, which combat the chemicals and poisons in the body.

If you wish to reach the top in bodybuilding, you need abundant and limitless energy. Optimal energy can be obtained through intelligent nutrition, and this may mean some of you need extra vitamins and minerals.

The majority of vitamins are water soluble, which means that you will absorb what is required and excrete the balance. A, D and E are the only vitamins that are fat soluble. Large doses of these vitamins cause side effects. The vitamins and minerals I recommend are at the end of this chapter. In reasonable amounts, extra vitamins and minerals are safe to take and help produce optimal performance.

Water. Most people don't think of water as a nutrient, but it's important in most biochemical reactions in your body. Your body is mostly water, especially the muscle tissue. Adipose tissue (fat), contains less water. Dehydrating your body before a competition does little to get rid of fat.

SUPPLEMENTS

As I mentioned, taking vitamins and minerals is good insurance against disease. But there are other kinds of supplements that you can take besides vitamins and minerals.

The most popular of these other supplements is undoubtedly protein powder. Taking protein powder blended in a glass of milk or juice is one way to make certain that your body is getting all the eight essential amino acids that it needs to nourish muscle. It is also a good way to take in adequate protein and still limit your overall caloric intake. When you're trying to nourish muscle mass but stay trim simultaneously, a product like Weider 90% Sugar-Free Super Protein, Dynamic Muscle Builder or Life Essence may be just the nourishment your body needs.

The best way to mix a protein drink is with a blender. Some bodybuilders call their blender their `raining partner;' because they use it so much. Pour about eight ounces of milk or juice into the blender, then add one or two tablespoons of protein powder. If you want to increase your protein intake even more, include a spoonful or two of Life Essence. Finally, you can blend in a piece or two of soft fruit or a few berries as flavoring. (It's a good health practice to avoid using chocolate syrup and similar flavorings.)

Most of you are undertaking my course because you want to gain muscular bodyweight, and a few will want to lose weight.

"To create maximum muscular growth, without adding fat to your bodyweight, you must depend on proper nutrition as well as well planned workouts."

It does you no good to gain a lot of weight if it's just fat. It would be healthier for you to stay on the thin side than to pile a lot of useless fat on your body. Therefore, the supplements I recommend are protein and vitamins and minerals that will help your body assimilate and convert your food. Now, you don't need to overload your body with vitamins and protein. But as a hardworking athlete you probably need more protein and supplements than the average person who eats poorly and lies around like a slug all day. These are the supplements I recommend:

- 1) Life Essence protein (free-form amino acids)
- 2) **Dynamic Muscle Builder** (high protein powder for mixing with fresh juice or nonfat milk) if you do not want to gain weight.
- 3) **Anabolic Mega Pak** or my special Aminobolic Mega Paks (to supply specific amounts of amino acids and other natural ingredients)
- 4) Carbo Energizer (taken before and after workouts or in the morning for energy)
- 5) **Megabolic Mega Paks** (to provide vitamins and minerals your body needs)

Finally, I'd like to leave you with this handy little Yes and No food chart to help you decide what you should and should not eat:

YES: Nonfat milk, natural yogurt, low-fat cottage cheese and regular low-fat cheese, low-fat meats (lean hamburger, lean steaks, lean roast, fish, skinned chicken and turkey), fresh fruit and juices, vegetables, beans, whole-grain and rye

breads, rice, lentils and nuts, baked potatoes, yams, pasta, seeds, bean curd and unlimited salads without mayonnaise-based dressings. Dress your salads with a mixture of lemon or lime juice, sunflower or safflower oil and some herbs (tyme, oregano).

NO: Refined products, sugar products (candies, cakes, ice cream, etc.), butter, margarine, egg yolks, deep-fried foods, TV dinners, frozen foods, canned foods, junk foods and convenience foods.

A SAMPLE MENU

Following is a typical champion bodybuilder's daily menu for building muscle. -

- Breakfast. Cottage cheese or yogurt, whole-grain cereal (with nonfat milk), fruit, supplements: Muscle Builder Protein Powder and Megabolic Mega Pak.
- Lunch. Large tuna and vegetable salad, bread or crackers, fruit, nonfat milk, supplements: (6-8) Life Essence capsules.
- **Dinner**. Broiled chicken, rice, one or two fresh cooked vegetables, iced tea with fructose, supplements: (500 mg) Vitamin C.
- Snacks. Protein shake, fresh fruit, yogurt, sunflower seeds, nuts, fruit juice, dried fruits, popcorn.

"During the off-season, diet and training are a 50-50 proposition for building size. But as competition approaches, diet becomes 75% of the battle for creating definition. Remember, you can't flex fat!"

GAINING WEIGHT

Many young bodybuilders are thin and want to gain muscular bodyweight. Weight training will lead to increased muscle and therefore to an increase in bodyweight. If you are concerned about gaining weight, however, it may be that you are not undermuscled but simply lack bodyweight. For instance, body composition testing has shown that the average man has about 20-25% bodyfat. Female and male athletes are lower than this, while the average woman is higher. If you're very low in bodyfat you should carry more while you're building muscle mass.

This is done by eating more. A pound of fat contains 4185 calories. To gain a single pound you must eat 4185 calories more than you expend. Remember: 1 oz fat yields in your body 9.3 calories, 1 oz carbohydrates, 3.75 calories '1, 1 oz protein, 4.1 calories.

* some nutritionists simplify here and say 4.1 calories.

Start by eating foods high in calories, such as nuts, seeds, beans, fruit juices and dried fruits. Drink a lot of milk, too! But don't stuff yourself at every meal. I recommend eating six meals per day, allowing about three hours between each meal. You can also try taking a weight-gaining supplement, such as Weider Crash Weight Gain, between meals or at the end of each meal.

Here are some of the best foods for gaining weight-fruit juices, milk, cheese, yogurt, nuts, seeds, grains, red meats, peanut

butter, ice cream, breads, bananas, vegetable and cooking oils, and weight-gain supplements.

Keep in mind that the older you get, the slower your metabolism becomes and the easier you will add bodyfat. As a bodybuilding competitor, you'll want to be able to diet back down to that 8-12% bodyfat level for contests. So gain the weight, but don't establish habits that will be hard to break when weight loss is more important to you than weight gain.

WEIGHT LOSS

Just as you gain a pound of bodyfat by taking in 4185 calories, you lose a pound of fat by expending 4185 calories more than you take in. Bodybuilders usually need to burn off some fat to achieve muscularity for contests. They do this in two ways, diet and exercise.

Dieting involves cutting back on your food intake without becoming weak and undernourished. The smart way to do this is a little at a time, planning on losing no more than one or two pounds of fat per week. Any more than that, and you will also tend to lose muscle mass.

While you are dieting, step up your exercise too. Some bodybuilders do this by going on my Double-Split Routine (see Chapter 28, Principles), training twice a day, six days per week. Others practice quality training and add more aerobic exercises. When you walk or run a mile, you burn up about 100 calories. This means that covering three miles three times per week will consume about 900 calories, in addition to the energy burned up in the gym. Even an energy expenditure this small is significant. But the real benefit of training is increased basal metabolic rate, which means more calories are burned during rest.

Make sure you never get so overweight that you need to diet more than 6-8 weeks to get down to competition weight. The days of "bulking up" going 30 or more pounds above your best condition-are over. Not only does bulking up make it extremely difficult to get back into shape, but the body does not build muscle efficiently when it has to carry around that much fat.

Here is a breakdown of some foods and their food values to help you lose weight:

"The number of titles a-gifted bodybuilder has won does not make him an authority; nor does it prove that you should follow his methods. Your workouts must be uniquely programmed for your individual body type and temperament if you really want to achieve your full potential."

Meat, Poultry, Fish	Calories	Protein (grams)	Fat	Carbs		
Hamburger (three ounces)	245	21	17	0		
Chicken (three ounces)	115	20	3	0		
Oysters (one cup)	160	20	4	8		
Tuna, in oil (three ounces)	170	24	7	0		

The more fat in a food, the more calories. You can see that the above examples contain about the same amount of protein, yet vary in fat content. Let's continue our breakdown with some other common foods:

	Calorie	es Prote (gram		Carbs
One Egg	80	6	6	trace
Asparagus (four spears)	10	1	trace	2
Broccoli (one stalk)	45	6	1	8
Lettuce (one head) (As you can see, lettuce is	30 very low i	3 n calories	trace s.)	6
Avocado	370	5	37	13
Orange	65	1	trace	16
Orange Juice (one cup)	110	2	1	36
Watermelon (one wedge)	115	2	1	27

Again, looking at the avocado, we find the relationship between high fat content and high calories. And looking at how oranges compare to orange juice, we discover that the more you process and concentrate a food, the more calories it contains.

Of course, most nutritional guides also list other information, such as vitamin and mineral content. This is helpful when you're planning a balanced diet.

Beware of one thing, however. Processed foods, such as canned items and TV dinners, are likely to be loaded (even if the additives aren't listed) with sodium, sugar and chemical preservatives. So try to stick with fresh, simple, natural or raw foods whenever possible.

MAINTAINING YOUR WEIGHT

Keeping your weight where you want it is the goal of most fitness buffs. Overall, maintaining your weight is a matter of energy balance. You must burn up as many calories as you consume. Since your metabolism slows down as you age, it's wise to step up your exercise a bit and cut back on fatty foods as you get older.

If you want to maintain your weight, here are some rough caloric estimates you can use:

- 1) If you are inactive, multiply your weight by 10. This is how many calories you can take in over a 24-hour period to stay even. If you weigh 200 pounds, you can consume 2000 calories to maintain that weight.
- 2) If you are moderately active, if, for instance, you play nine holes of golf three times a week or play a couple rounds of active tennis every week, you can safely consume about 15 times your weight in calories to stay even. Our 200-pounder can take in around 3000 calories now.
- 3) If you do strenuous physical activity every day, you can con sume up to 20 times your weight in calories and still you will probably stay even. Thus, a very hard training 200-pound

bodybuilder, one who trains twice a day five times a week, can get away with eating 4000 calories a day and stay even in bodyweight. You should maintain your optimum weight on a nutritional plan of balanced foodstuffs made up of the protein, carbohydrate and fat

"Your muscle fibers grow only if they can incorporate enough protein. Don't overtrain them."

ratio discussed earlier. You should also consume the right amount of vitamins, minerals and fresh water every day (12-16 eight-ounce glasses). A simple caloric handbook available at the supermarket or drugstore can tell you the approximate number of calories, carbohydrates and fats contained in various foods. Use this handbook and the table of the four main food groups to set up your appropriate maintenance diet.

ENERGY

You are not going to get very far in the sport if you're constantly fatigued. This is a common complaint, but very little fatigue is the result of exercise. In fact, it's the opposite!

The way your body works, the more energy you use up, the more your body provides. When you exercise hard-as long as the body is getting enough food and rest between workouts-you will find your energy levels increasing.

Poor nutrition will make you tired. After you eat a meal high in fats, for example, you feel sluggish, since it takes so much energy for the body to digest fat. It's a slow process. Also, a few hours after a highcarbohydrate meal, especially after eating food high in simple sugar (soft drinks, ice cream, candy, etc.), you will feel a letdown from the abrupt rise and fall of your blood sugar.

The most common reason for lack of energy is the depletion of your energy reserves from feelings of anxiety, nervousness and depression. Those emotions drain you. A day spent in tense and anxious mental work is fatiguing, and difficult to recuperate from.

- If you feel you're suffering from a lack of energy, here is a checklist that you can use in figuring out why:
- 1) Are you eating properly, consuming a balanced diet that is nutritious?
- 2) Are you overtraining, trying to exercise at a level for which you are not ready?
- 3) Are you giving yourself enough time to recuperate between workouts?
- 4) Are you getting enough sleep?
- 5) Are you under emotional strain?
- 6) Is your job or schoolwork draining you of nervous energy?

If you aren't getting enough sleep, go to bed earlier! If you're not giving yourself enough recuperation time, change your daily schedule. Some problems will not be easily overcome, but just knowing what they are is a help.

In any event, what you want to do is approach each workout with total enthusiasm. If you can't, your training will suffer.

Sometimes the best solution is to just take a few days off training. Remember, your body has limits, and you can't push it past those limits without suffering unpleasant consequences. Fatigue may just be one of your body's ways of telling you to let up a bit.

"The credo of my champions has always been `What you can conceive, you can achieve.' "

VITAMINS AND MINERALS

As I mentioned, vitamins and minerals are vital for every metabolic reaction in the body. They are crucial for building a muscular body, good health and preventing disease. That is one of the main reasons I created my Megabolic Mega Pak, which contains all the vitamins and minerals listed below as well as trace minerals.

1) B Complex Vitamins

This group of vitamins is necessary for healthy nervous function; the metabolism of carbohydrates, protein and fat; tissue repair; promotion of healthy skin; good digestion; energy production; prevention of anemia; and, in particular, healthy blood. Found in fish, pork, liver, kidneys, yeast, whole grains, fortified cereals, nuts, beans, peas, eggs, milk, cheese, leafy green vegetables, soy beans, peanut butter, tomatoes, peanuts and corn, the B Complex is water soluble and must be replenished on a daily basis.

2) Vitamin C

Often called the "everything" vitamin, Vitamin C is responsible for the synthesis of new tissue and cells in your body every day. It's also water soluble and needs constant replenishing. Vitamin C helps strengthen blood vessels, teeth, hair and gums. It fights infection, heals wounds, regulates vital body functions, synthesizes necessary hormones and combats stress! It's found in oranges, grapefruit, lemons, apples, strawberries, melons, tomatoes, cabbage, broccoli, kale, cauliflower and Brussels sprouts.

3) Vitamin A

Essential for your nervous system and the various related functions such as vision. Necessary for strong bones, good teeth and skin. Also helps fight infection. Found in fish, liver, eggs, milk, cheese, tomatoes, fortified cereals, grains and carrots. Vitamin A is fat soluble and can be stored in your body. Therefore, don't take excessive amounts of this vitamin.

4) Vitamin D

Necessary for strong teeth, bones and your body's vital functions, Vitamin D is found in milk and milk products, and eggs. It is also found in liver and can be produced in your body from sunlight. It's also fat soluble and can be stored in the body, so should not be taken in excess.

5) Vitamin E

Partially responsible for red blood cell strength and reproducing living tissue. It's found in unrefined vegetable oils, fortified and unrefined cereals, fish oils, unprocessed grains, soybean oil and eggs.

6) Vitamin K

Necessary for normal blood clotting. It's found in pork, liver, egg yolks, green vegetables, lettuce and cauliflower.

7) Calcium

Important for nerves and in muscle contraction. Calcium means strong bones and teeth too. It's found in milk, cheese, yogurt, broccoli, kale, collards and other greens.

8) Iron

Necessary in the body to produce hemoglobin for carrying oxygen to your cells. It's found in meat, liver, beans, eggs, vegetables and dried fruits.

9) Phosphorus

Important in bone and teeth strength. It's found in high concentration in all red meats, fish, eggs, chicken, nuts and whole-grain cereals.

10) Pantothenic Acid

Partially responsible for the utilization of proteins, fats and carbohvdrates It's found in fish, meat potatoes, eggs, broccoli, cauliflower, peas, soybeans, peanuts, whole grains and cabbage.

11) Folic Acid

Necessary for red blood cell formation and for metabolic functions. It's found in asparagus, spinach, kale, turnips, broccoli, corn, lettuce, cabbage and nuts.

12) Potassium

Helps regulate body water balance and also to maintain the heartbeat and coordinated muscle contraction. It's found in vegetables, grains, potatoes and fruit.

13) Magnesium

Activates enzymes for carbohydrate and protein metabolism. Plays a role in muscular contraction. It's found in vegetables, wheat germ, figs, corn, apples, nuts and soy beans.

Even from this brief outline, you must realize that nutrition plays as big a role in creating a superior body as exercise and emotional control do. Therefore, I advise you to take a great interest in what you eat and make a thorough study of the effect that nutrition has in your guest for physical perfection and a lifetime of good health.

CHAPTER 24 DO YOU HAVE WHAT IT TAKES?

You may at this point be asking yourself, "Do I have the potential to become a great bodybuilding champion?" It's almost impossible to look at an individual who has never trained and tell if he has the potential to become a champion bodybuilder. Many of the great champions such as Bertil Fox, Larry Scott and Bill Pearl were small and slight when they began training, yet they went on to become three of the most powerful men of all time. Great champions become great champions not so much out of genetic proclivity but because they are willing to work brutally hard. They also are consistent in their training and follow good nutritional plans.

If you are concerned about your chances of becoming a great bodybuilder, remember that-as in any sport-practice is what leads to winning championships. Bodybuilders all gain muscle mass at different rates. They also seem to get defined at different rates and have vastly different metabolisms. Bertil Fox *never* eats pizza or ice cream, for example, yet Corinna Everson indulges in such foods quite often and still won the Ms. Olympia and the National Championship!

If you analyze the physiques of the champions, you will see that the very best usually have some favorable qualities to work with:

- 1) Champions are able to develop muscle mass fast enough so that they can maintain their training enthusiasm without much trouble
- 2) Champions are mentally committed to their goal of becoming the best bodybuilder in the world.
- 3) Champions have bone structures that lend themselves to fine symmetry and proportion. This usually means fairly large wrist bones, but small hips and knees. Usually their shoulders are wide in comparison to their hips. Additionally, people with long, full muscle bellies, an attribute largely due to genetics, have a head start on those who don't.
- 4) It seems that champions don't have any weak bodyparts. All their muscles respond to training.
- 5) Champions can afford to eat the right foods, including plenty of supplements.

Assessing genetic potential is nearly impossible until you have spent at least one year in hard training. When you bodybuild, you should train as if you have unlimited potential because I want you, as my pupil, to reach your full potential. Remember, even if you don't win the Mr or Ms. Olympia someday, everyone has it within him to develop fantastic strength and muscle mass if he is dedicated and works very hard. I can promise you this: After you have completed my course, you will have a body that is one in a thousand, a body you can truly be proud to own and display.

"Persistence and consistency are the keys to developing a great body. Nothing comes easy in this world, least of all a great body. But my system will show you the way to physical perfection!"

CHAPTER 25 HOW TO DEVELOP THAT ALL-IMPORTANT SYMMETRY

It is not enough for me to advise you on building muscle. I must also show you how to develop symmetry.

My goal for you is to develop a well-balanced, symmetrical and attractive body, as well as a muscularly powerful one. Therefore, I want you to study this chapter and give it full attention.

My study of the results of contests over the past 45 years of bodybuilding proves that it is not always the bodybuilder with the biggest measurements who wins the titles: 19-inch arms and a 50-inch chest will not in themselves win a world title, unless these herculean measurements are backed up by proportionate measurements in other bodyparts.

All my pupils realize that, beyond a certain point, muscle size is unimportant unless accompanied by proportion. As my student, always bear in mind that bodybuilding is the *science of physical perfection*. This does *not* mean 18-inch upper arms and 121/z-inch forearms, or a 52-inch chest with a 31-inch waist. Neither does it mean a massive upper body and poor leg development.

Physical perfection means that neck, shoulders, arms, chest, waist, back and legs are balanced in size and muscularity. Any weakness in symmetry or proportion destroys the harmony of the physique and robs you of a prize-winning body.

Therefore, while I want you to develop muscle quickly and while it is toward that aim that I direct these courses, I still want you to preserve symmetrical development. That's why I'm devoting this entire chapter to the subject.

In training for symmetry, rely on the tape measure, regularly taken photos, about every three months and the mirror as being your critics and friends. They will tell you if your progress is satisfactory or not!

Make a point to measure your entire body every three months, and to keep a careful record of these measurements. In this way

you will be able to tell which parts of your body are growing too fast and upsetting your physique balance. You will also learn quickly which parts are not responding and in need of special attention.

Such a check on your measurements will be important during your first year of training, while you are gaining bodybuilding experience. Some bodybuilders have learned through years of experience to study their bodies solely by use of the mirror, or else in physique photographs, and can tell at a glance if any bodypart is out of proportion. However, until you have gained such experience, you should use the tape measure.

Later on in this chapter I have set up measurement and musclestrength charts. These charts give approximate proportions according to your weight and height, as well as approximating the strength of each of your muscles in relation to one another.

I have removed all elements of chance from your training; and once you have learned how to use these charts you will know what your ideal proportions are, as well as what the strength of your muscles should be.

Besides using the tape measure and these charts to guide you in your training, you must also realize that an impressive physique depends on muscular delineation and contour. It's possible for the tape measure to reveal that your body girths are nearly perfect, yet if there is a lack of muscularity or contour, you will not be perfectly developed. Perfect physical proportions and clear-cut muscular definition: The two are inseparable in complete physical success!

Physically, beginners fall into two main groups. Either they're noticeably thin and underweight or else they're fat and overweight. Beginners who weigh what they should, yet whose muscles are underdeveloped and covered with too much fat and whose girth measurements are not symmetrical, comprise another smaller group. If a beginner is scrawny and underweight, the largest girth of his body will probably be his hips. If such is the case, the hip girth measurement can be used to predict what the muscular girths of the other parts of the body should be. That is to say, if your hips are large, from their size you can determine the proper proportionate girths of your chest, neck, upper arms, forearms, waist, thighs and calves.

Ideally, chest girth to hip girth in a man is 10 to 9. That is, the normal chest girth should be 1-1/9 times the hip girth. Accordingly, a man with 36inch hips should have a chest girth, not of 36 or 37 inches, but of 40 inches. The chest muscles and the back muscles must be built up by exercise until the correct chest girth is obtained.

"With my bodybuilding system, there's no room for excuses, no place for the words `I can't' in your vocabulary. You can accomplish anything!"

The same method can be used to arrive at the proper girths of the rest of the body. The girths of the neck, upper arms, waist and forearms can all be derived from the girth of the chest; and those of the thighs and calves from the hips.

A perfectly proportioned neck should measure a little over 38% of the girth of the normal chest; that is, for a 40-inch chest, the neck girth should be 15.3 inches. The girth of the forearms (average of right and left) should be 30% of the chest girth, or 12 inches; and the girth of the flexed upper arms (average of right and left) should be 20% larger than the straight forearm girth.

The waist girth should be 75% of the chest girth, or 30 inches. The thigh girth should be 60% of the hip girth, or 21.6 inches and the calf girth should be 40% of the hip girth and about 65% of the thigh girth, or the same as the flexed upper arm.

In the foregoing illustration, I have, for convenience, assumed that the bodybuilder had a hip girth of 36 inches. However, the same ratios (for neck, arms and other parts) would apply for any other hip girth.

I realize that many of my pupils may not be used to working with figures, and that those which appear here may seem difficult to grasp. However, if necessary, you should read over this chapter several times, then work out your own proportionate development based on your present hip measurement. If you do this, you'll find that all the figures fall into a pattern.

To continue with our discussion, let us now assume that if our bodybuilder had, along with his 36-inch hips and 36 or 37-inch chest, a neck of 14 inches, biceps of 121/2 inches, forearms of 11 inches, a waist of 30 inches, thighs of 20 inches and calves of 131/2 inches, his bodyweight should be 145 pounds, However, if he were proportionately developed to his hip size, the man should weigh at least 155 pounds and possess the girths listed below:

36 inches
69 inches
155 pounds
15.3 inches
14.4 inches
12 inches
40 inches
30 inches
21.6 inches
14.4 inches

A comparison of these figures shows what the bodybuilder should do to improve his physique. In aiming for a weight gain of 10 pounds, a man should strive to increase the girth of his neck by an inch and a quarter, his flexed upper arms by nearly two inches, his forearms by an inch, his chest by three or four inches, his thighs by over 11/2 inches and his calves by nearly an inch. Meanwhile, he will not need to be concerned about the girths of his waist and hips, since they are large enough!

Both parts probably will increase slightly as his training proceeds, the waist going to at least 31 inches and the hip girth to over 37 inches. When the latter measurements are reached, naturally our subject's bodyweight will have increased to over 155 pounds. At that time, a whole new set of girth measurements should be worked out, based on the new and larger hip girth. Moreover, all the other girths should be cross-checked-that is, are the upper arms gaining in size rapidly enough for the forearms and the chest? Are the calves keeping up their ratio of 2/s of the thigh girth? And so on. If not, then special measures should be taken to bring these parts up.

Now, let us check your physical development from the standpoint of proportionate strength. Just as the various girth measurements of your body can be compared by means of proportion (or "expectation") ratios, so can the amounts that you can lift in various exercises.

One of the most popular exercises is the bench press. Naturally, such specialization tends to develop certain muscles more than others; and the bodybuilder who is always judging his overall progress by the amount of weight that he can bench press is not necessarily on the right track. He may, it is true, be improving his ability in one of the power lifts (if his goal is to be a competitive lifter), but that doesn't mean that he is either becoming strong all over or acquiring a symmetrical physique. There are movements other than constantly pushing upwards.

Hence, if a symmetrical, all-around development of the body is your aim, it is essential that your training program include

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exercises and movements that work muscles from all angles. This means that your exercise schedule should be reasonably varied.

Therefore, you should include all movements. If you follow this course, you will experience no difficulty in this direction, since the great variety of exercises contained in it assures you of complete muscular development. Still, you should periodically check your strength to make certain that you are progressing as you should. The most direct way of checking your physical strength is by the amount of weight you handle in the various exercises. Let us take the ordinary two-arm barbell press as a basis. If you can use 100 pounds in the press as an exercise, here are the proportionate

poundages that you should be able to employ in certain other exercises.

	r oullus
Two-Hand Regular Curl	67
Reverse Curl	57
Pullover at Arms' Length	60
Bench Press	126
Squat	216
Two-Hand Deadlift	236

Nowadays, with the tendency of-so-many bodybuilders to specialize in certain lifts or exercises, it is much easier to find men of tremendous muscular development than of true allaround symmetry and proportion. In fact, the word "symmetry" in itself is often used so carelessly that one is inclined to wonder if the users know what it means. Even in some world champion contenders, as a result of specializing indiscriminately on such exercises as the bench press, squat, lying lateral raise, press on inclined board and chinning with extra weight, there is a disproportionate development of certain parts and a relative underdevelopment of others

All these exercises are valuable, and have their place in the bodybuilder's routine. They all appear in this system. Bodybuilders who do engage in such incorrect specialization maintain a fair proportion of the neck, forearms, thighs and calves. However, usually their hips and waist are too small, and their arms and chest too large. In fact, the chest is far too large for the waist, the neck too slender for the chest and the upper arms, the thighs too large for the hips and the calves too small for the thighs. This is why these men do not win the big titles. Those who train with proportion in mind do!

"To create maximum muscular growth, without adding fat to your bodyweight, you must depend on proper nutrition as well as well planned workouts."

Frequently one sees a physique aspirant who can lift 400 pounds in the bench press, but who experiences difficulty in curling 170 pounds (when he should be able to curl 190 pounds or more). Again, one will see a 200-pound bodybuilder squat with 450 pounds, yet have trouble raising 400 pounds in a deadlift (when he should be able to do at least 490 pounds).

The lesson to be learned from such examples is that incorrect and specialized training builds a specialized physique. The bodybuilder who hopes to make a name for himself in the sport should avoid such practices, and only specialize to correct either strength or physique flaws and avoid them!

The aim of all my students should be symmetrical development and proportionate strength. This must be your ultimate aim and, by training as outlined in this course and paying particular attention to this chapter, you should possess in time correct proportions, well-balanced muscular strength, and symmetry in all your bodyparts.

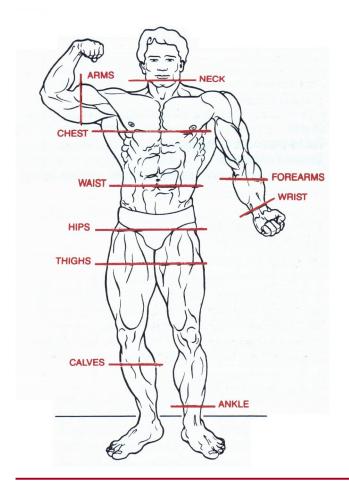
I have printed a table of ideal muscular measurements I want you to strive for. Bone size is not taken into account. If your bones are slender or thick, the muscular girths should first be in correct proportion to each other. After such proportions are obtained, you will be so experienced as a bodybuilder that you will be able to use photographs of yourself as a guide for your training. However, until then, use this chart and let the tape measure show you whether you are in perfect muscular proportion or not.

"Bodybuilding is an art as well as a science. You must learn to balance a multitude of factors and temper them with experience if you want to succeed,"

Weight Per Inch	Neck	Biceps arm	Fore-	Chest	Waist	Hips	Thighs	Calf
1.899	14.0	13.1	10.9	36.4	27.3	32.8	19.7	13.1
2.038	14.5	13.6	11.3	37.9	28.4	34.1	20.4	13.6
2.183	15.0	14.1	11.8	39.3	29.4	35.3	21.2	14.1
2.334	15.6	14.6	12.2	40.7	30.0	36.6	22.0	14.6
2.489	16.1	15.1	12.6	42.1	31.6	37.9	22.7	15.1
2.650	16.7	15.7	13.1	43.5	32.6	39.2	23.5	15.7
2.817	17.2	16.2	13.5	45.0	33.7	40.5	24.3	16.2
2.989	17.8	16.7	13.9	46.4	34.8	41.7	25.0	16.7
3.195	18.3	17.3	14.4	48.0	36.0	43.2	25.9	17.3
3.379	18.8	17.8	14.8	49.4	37.1	44.5	26.7	17.8

Instructions: To use the Ideal Proportion Chart, first divide your bodyweight by your height. This will give your weight per inch of height. When this is determined, select the figure in the far left column which is closest to yours. Then, follow the figures straight across to learn your ideal proportions. When following the advice in this chapter, remember these two points.

- Measure yourself once every three months.
- Check in the mirror to make sure that your muscles are defined. (If not, decrease your calories slightly)
- Also check to make sure your muscles have fullness, depth and pleasing contour. (If not, you may need a slight change in routine.)
- Build proportionate muscle strength as well as size.
- · Train regularly and follow a sensible diet.



HOW TO TAKE MEASUREMENTS

You should measure your bodyparts when your muscles are cold, not after they've been exercised. Take the measurements soon after you awake in the morning, always at the same time and always measuring the same area, usually the middle of the muscle. Do not pull the measuring tape too tight or let it hang loose. You must be meticulous so that your measurements are always accurate.

Use a fabric tape, making your measurements to the nearest oneeighth inch at the points illustrated in the photographs. It's important that you pass the tape perpendicular to the bony framework around the part being measured. In other words, go straight around, not diagonally.

Finally, it's a good idea to check your tape occasionally against a metal tape or ruler to see that it hasn't shrunk or stretched.

CHAPTER 27 YOUR WEIDER DICTIONARY

Here is a list of commonly used words and training aids that you should become familiar with to better communicate with your fellow bodybuilders and to help you understand our sport.

Abs--short for abdominal muscles.

Aerobic Exercise--nonstop exercise using big muscle groups. Increases heart rate long enough for a training effect upon the lungs and cardiovascular system.

Anatomy and Physiology--refers to your muscles and the way your body responds to exercise and diet.

Anaerobic Exercise--strength training. Anaerobic means without oxygen and involves short intense bursts of energy.

Ankle Weights--special weights worn around the ankle giving resistance to different leg movements. The same type of system can be applied to the wrists to intensify arm movements.

Arm Blaster--an arm-training device with a strap that goes around the back of the neck and a built-in support that fits underneath the upper arms, isolating the arm muscles for superintense biceps-peaking work.

Atrophy-withering away--decrease in size and strength of the muscles.

Benching--short for bench press exercise.

Blasting--pushing your muscles to the limit. Bodyfatlevel of stored bodyfat.

Bulking Up--training heavy and ingesting a high-calorie diet to gain weight and muscle mass.

Burnout--state of mental and physical fatigue (overtraining).

Carbs--short for carbohydrates, such as are found in bread, fruit and vegetables.

Cardiovascular Training--training that conditions your heart and lungs.

Chalk-magnesium--carbonate used on your palms to help secure your grip.

Chinning Bar--short for wall-, door- or ceiling-mounted pull-up bar for upperbody training.

Circuits--nonstop training, going immediately from one exercise to another.

Contest--bodybuilding competition.

Cool-Downs--a series of light, semi-aerobic movements and stretches ending your workout. Cool-downs gradually decrease your heart load.

Cross-Over Pulley Cables--special standing unit to work your inner chest by pulling the cable handles from an outstretched position together so they cross over in front of your body.

Delts--short for deltoid muscles.

Dip Belt--large heavy belt worn around hips with chain at each end that can be attached to a barbell plate or dumbbell for additional resistance during certain exercises like dips.

Endurance--ability of a muscle to produce force continually over a period of time.

Estrogen--female sex hormone.

EZ or Cambered Bar--special bent bar for biceps and triceps work.

Fascia--fibrous connective tissue that covers, supports and separates all muscles and muscle groups. It also unites skin with underlying tissue.

Fast Twitch--refers to muscle cells that fire quickly and are utilized in anaerobic activities like sprinting and powerlifting.

Flexibility--also referred to as range of motion, this means how well you can stretch and move your joints. Lack of tightness in your muscles.

Flexing--tensing your muscles.

Forced Reps--enlisting the physical aid of your training partner to finish the last couple of reps on a set.

Free Weights--barbells and dumbbells, as opposed to machines.

Gloves--worn on the hands for protection and to give a secure grip.

Glutes--short for the gluteal muscles (minimus, medius and maximus) in the buttocks.

Gravity Boots--also called inversion boots, this equipment has hooks so you can hang upside down to stretch the muscles and tissues of your back.

Hams--short for hamstring muscles, the leg biceps.

Headstrap--webbed, chain apparatus worn around the head that has an attachment for weights and is used in neck exercises.

IFBB--International Federation of Bodybuilders, a worldwide organization of amateur and professional bodybuilders. To date, a total of 129 countries are members.

Intensity--refers to the degree of effort put into your training and also to a percentage of your maximum training weight.

Isokinetic Exercise--exercise in which there *is accommodating resistance*. Also refers to constant speed. Machines are supposed to vary the amount of resistance being lifted to match power output of the muscle.

Isometric Exercise--muscular contraction in which muscle maintains a constant length and joints do not move. These exercises are usually performed against a wall or other immovable object.

Isotonic Exercise--muscular action in which there is a change in length of muscle and weight, keeping tension constant. Lifting free weights is a classic isotonic exercise.

Kinesiology--study of muscles and their movements.

Lat Machine or Pull--a unit in which you sit or kneel and pull a bar down to your chest or behind your head to build your lat muscles.

Lats--short for the latissimus dorsi muscles in the back.

Leg Curls--exercise in which you lie on your stomach and bring your heels towards your glutes against resistance to strengthen your hamstrings.

Leg Extensions--exercise in which you sit and straighten your lower legs against resistance.

Leg Warmers--clothing worn to keep your lower leg muscles warm

Ligament--stringy, fibrous band of connecting tissue connecting two or more bones or cartilages, or supporting a muscle, fascia or organ.

Lock-Out--partial repetition of an exercise by pushing the weight through the last few inches of a movement.

Machines--resistance apparatus such as is manufactured by Universal, Polaris, Kaiser, Nautilus, Weider and others.

Mats--special pads for exercising.

Max Out--to lift your maximum amount of weight in any exercise for one repetition.

Midsection--muscles of abdominal area, including upper and lower abdominals, obliques and rectus abdominus muscles.

Mind Set--setting goals and positively concentrating on meeting them.

Mr. Olympia--the top-rated professional men's competition, created by Joe Weider

Ms. Olympia--the top-rated professional women's competition, also created by Joe Weider

Muscle--tissue consisting of fibers organized into bundles that contract to cause bodily movement. Muscle fibers run the same direction as the action they perform.

Muscle Tone--condition in which a muscle is in a constant, slight state of contraction and appears firm.

National Championships--the top-rated men's or women's amateur competition in four weight classes.

Negatives--refers to the Weider Retro-Gravity Principle of resisting the weight while lowering it against gravity.

Olympic Lifting--competitive lifting done in the Olympic Games, consisting of the two-hand snatch and clean and jerk.

Olympic Set--the big bar and plate system used in training and in the Olympic Games.

Pec--Deck Machine-a chest machine to build up your pectoral muscles.

Pecs--short for pectoralis muscles of the chest.

Peaking--refers to any exercise situation in which you can get maximal isolation of a specific muscle. For instance, you do strict bent-over concentration curls to "peak" your biceps. Also, preparing for a competition.

Plyometic Exercise--where muscles are loaded suddenly and stretched, then quickly contracted to produce a movement. Athletes who must jump do these, i.e., jumping off a bench to the floor, quickly rebounding to another bench.

Pose Down--bodybuilders performing their poses at the same time in a competition, trying to outpose one another.

Posing--displaying your muscles in a systematic way either in training or in actual competition.

Power--strength plus speed.

Powerlifting--national and international competition lifting consisting of the squat, bench press and deadlift.

Power Rack--a specially constructed weight framework with a selfcontained safety system in which you can lift without spotters.

Progressive Resistance--method of training where weight is increased as muscle gains strength and endurance. The backbone of all weight training.

Pulleys--wheels with ropes attached to weight stacks for use in exercising.

Pumping Iron--phrase that has been in use since the Fifties, but recently greatly popularized. Lifting weights.

Quads--short for quadriceps, four-headed muscles of the thighs.

Range of Motion--extent of the movement in an exercise.

Routine--program of sets and reps that is repeated in subsequent training.

Scott Bench--also called the preacher curl bench, this is a nearly vertical unit for training the arms.

Shape--how well your muscles are formed and how full and round they are. Shape also refers to the balance of your muscles with your frame.

Shredded--very defined, very cut up. Also, ripped. Slant Board-another name for sit-up board.

Slow Twitch--muscle cells that contract slowly, are resistant to fatigue and are utilized in endurance activities such as longdistance running, cycling or swimming.

Squat Rack--upright framework that you can get under, placing the bar across your back to do knee bends.

Straps--special bands attached to your wrists and to the bar that help secure your grip for pulling movements.

Strength--the ability of a muscle to produce the maximum amount of force.

Stretching--a series of coordinated movements to loosen the muscles and connective tissues.

Stretch Marks--tears (slight scars) in skin caused if muscle or fat tissue has expanded faster than skin can grow.

Striations--linear details throughout your muscles. **Sweatbands-**-cotton strips worn around the wrists or forehead to soak up excess sweat when training.

Symmetry--the shape or outline of the body, both bone structure and muscle balance.

Tank-T--T-shirt with straps on the shoulders allowing freedom when training.

T-Bar Rows--exercise in which you pull a bar up to the chest to build up the lat muscles.

Tendon--a band or cord of strong, fibrous tissue that connects muscle to bone.

Testosterone--principle male hormone that regulates overall growth and stimulates blood flow.

Training Belt--a protective device worn around the waist whenever your back needs support such as in pressing or squatting.

Training Effect--increase in functional capacity of muscles as the result of increased (overload) placed upon them.

Training to Failure--exercising until you can't do another rep. Traps short for trapezius muscles, the two large muscles in the upper back on either side of the neck.

Tri's and Bi's--short for triceps and biceps.

Warm-Ups--a series of movements to increase blood circulation in preparation for exercise.

Weight Training Belt--Thick leather belt used to support lower back. Used while doing squats, military presses, dead lifts, etc. Wraps protective devices worn around the knees for support when squatting.

CHAPTER 28 THE WEIDER TRAINING PRINCIPLES

In training millions of my students around the world and working with the champions for over 50 years, I've had to organize bodybuilding training into a set of coherent rules. In fact, I've had to develop a completely new language for bodybuilders around the world so that we can all communicate. My principles range from beginning through intermediate instruction and go all the way up through the most advanced training. In this chapter I catalog all my principles as beginning, intermediate and advanced. I also explain briefly what these principles mean.

As a general rule, when I refer to beginning training, I mean that first 69 months. When I speak of intermediate training I refer to that first 9-12 months. Advanced training is for someone who's been working out consistently for longer than 12 months.

I want you to study my principles and see how you can use them to further your goals. During your bodybuilding career you will go through a variety of changes. By mastering these principles, you will be in a position to use the right principle at the right time to enhance your muscular growth and development. These principles have become the foundation of modern bodybuilding, and there isn't a single champion who hasn't used some or all of them during his or her career. Make them a scientific part of your future workouts and, like my champions, you will bring out the fine body that nature intended you to have.

BEGINNING TRAINING PRINCIPLES

1) **Progressive Overload Training Principle -** The basis of increasing any parameter of fitness (strength, size, endurance,

- etc.) is making your muscles work harder than they are accustomed to. You must progressively overload your muscles. For example, to gain strength, you must constantly try to handle greater weight. To increase muscle size, not only should you attempt to handle heavier and heavier weights, but you can also increase the number of sets you do and the number of training sessions. To increase local muscle endurance, you might progressively decrease your between-sets resting time or increase the number of repetitions or sets that you do. Everything is progressive. The overload concept underlies all physical training and is the solid base of the Weider System.
- 2) Set System Training Principle In the early days of the Weider System, most experts suggested that aspiring bodybuilders perform only one set of each movement in their routines. If they performed 12 exercises for a full-body workout, they would naturally perform 12 sets per workout. Our early Weider Principle was the first to advocate doing multiple sets (sometimes as many as 3-4 sets for each exercise) in order to completely exhaust each muscle group and stimulate maximum muscle hypertrophy.
- 3) Isolation Training Principle-Muscles can work in unison, or they can work in relative separation from each other. Each muscle contributes, in some fashion, to a whole movement, either as a stabilizer, an agonist antagonist or synergist. If you want to maximally shape or build a muscle independently, you must isolate it from the other muscles as best you can. You do this through anatomical position changes. For example, Scott curls isolate the brachialis arm flexor better than close-grip reverse lat machine pulldowns.
- 4) Muscle Confusion Training Principle Part of constant growth is never allowing your body to fully adapt to one specific training routine. Muscles should never accommodate. To grow they need stress. If you constantly vary exercises, sets, reps and angles of pull upon your muscles, they can never accommodate and adjust to the stress upon them. One of my strong beliefs is: To keep your muscles growing and changing, you must confuse them.

INTERMEDIATE TRAINING PRINCIPLES

- 5) Muscle Priority Training Principle Train your weakest bodypart first in your workout when your energy is highest. A high degree of training intensity builds muscle, and your intensity can be great only when your energy is high. For example, if your shoulders are weak, you should do all of your overhead presses, upright rows and laterals before you do any bench presses for your chest. In this way you can put maximum intensity into your shoulder workout. You give the shoulders training priority.
- **6) Pyramiding Training Principle** -Muscle fibers grow by contracting against heavy resistance. They also gain strength by contracting against such resistance. Theoretically, if you were able to load the maximum amount of weight you could lift in an exercise for eight reps and do it for a number of sets, without a warm-up, it would be a very effective size and strength builder. But you can't do this because of the built-in injury potential of training with

maximum weights without a warm-up. No one starts at his maximum weight.

The pyramid system was devised to get around this problem. Start with about 60% of the maximum amount you could handle for a single repetition, then do the exercise with this comparatively light weight for 15 reps. Then add weight and decrease your reps to 10-12. Finally, add weight until you reach about 80% of your max and do 5-6 reps. In this way, you can handle heavy weights after you are warmed up and reap the benefits without worrying about injury.

- 7) Split System Training Principle After three months of training on a three-day-a-week system, you may want to increase the overall intensity of your training. If you divide your body into upper and lower sections for training purposes, you can include more exercises and more sets for each section of your body and, thus train each section harder. On my split system of training, in the first workout of the week you might do eight exercises just for your upper body. Because you are just working your upper body, you will be able to do all eight exercises with superintensity because your energy levels are high. Then, the next workout day you will concentrate on your lower body, doing 6-8 exercises for these muscles with the same intensity. On the three-day-a-week system you would have to do both your upper body and lower body all on the same day. Naturally, your intensity would have to be lower on the three-day system. With the split method you can work each bodypart harder and longer and that's why you'll grow more symmetrical, larger and shapelier from the use of the principle.
- 8) Flushing Training Principle You must get blood into a specific muscle and keep it there to produce growth. Flushing is really bodypart training. For instance, when you train chest, doing 3-4 exercises for this bodypart alone, one after the other without exercising another bodypart until all of these chest exercises are completed, you are using the Flushing Principle for your chest. You are spending all your time on one area and, consequently, constantly flushing this area with blood.
- **9) Supersets Training Principle**-This is one of my better known principles. When you group two exercises for opposing muscle groups together, as with biceps curls and triceps extensions, you are doing a superset. The idea is to do two back-to-back individual sets, one of each exercise with little or no rest between them. Supersetting is actually neurologically sound. Tests prove that doing a set for the triceps after doing a set for the biceps improves the recovery rate for the biceps! It has to do with nervous impulses. So not only is supersetting a great pumping mechanism, it actually enhances overall recovery.
- **10) Compound Sets Training Principle**-A superset for the same bodypart (two back-to-back biceps exercises) is a compound set. In this case, you are not trying to facilitate recovery, but to superpump your muscles. When you compound for your biceps, for example, you would do a set of barbell curls followed by a set of incline dumbbell curls.
- **11) Holistic Training Principle** It's a scientific fact that different parts of your muscle cell contain proteins and energy systems that respond differently to different levels of exercise. Muscular fiber

proteins get larger when they are confronted with highresistance loads. The cell's aerobic systems (mitochondria) respond to high-endurance training. Therefore, to maximize the size of the total muscle cell, you must do a variety of repetitions, from low to high. This is the basic tenet behind holistic training.

12) Cycle Training Principle-During one part of your training year, you should construct routines for mass and strength. Other times, you should lower your weights, increase your repetitions and train with less rest between sets (quality training). In this way, you will avoid injuries, provide variety and keep progressing.

13) ISO-Tension Training Principle - Perhaps my most revered principle is ISO-Tension. It's also my most misunderstood principle (right up there with forced repetitions). ISO-Tension has to do with muscle control. You can also utilize this principle by flexing a muscle when you are not exercising - just flexing it, holding the peak tension for 3-6 seconds, repeating this procedure about three times. Champions use this method by tensing all their muscles three times weekly, because this constant isometric flexing enables you to neurologically control your muscles better and allows you to bring out muscle separation and peak when you pose in competition.

ADVANCED TRAINING PRINCIPLES

14) Cheating Training Principle-Cheating should be viewed not as a way of *removing* stress from a muscle,, but as a way of *increasing* it. The whole idea behind bodybuilding is to make your muscles work more, not less. Therefore, you should use cheating methods only to add a rep or two, or perhaps to assist your working muscles by using another bodypart. Let's say you are doing a set of concentration curls on a cable system, and you are not quite able to finish your last few repetitions. If you use your free hand to help the exercising arm to squeeze out a couple more reps, that would be judicious use of the Weider Cheating Principle. If, however, you lift your behind off the bench in an effort to get a couple more reps in the bench pressthat's *not* judicious use of the Weider Cheating Principle. The first adds to the stress on a muscle; the second *diminishes* the stress on the muscle.

15) Tri-Sets Training Principle-When you do three exercises for the same muscle group without a pause between sets, you are doing a triset. This technique allows you to pump your muscles rapidly. Since you hit them from three different angles, it's primarily a shaping technique. Trisetting emphasizes local muscle endurance recovery factors within the muscle and, as such, is a great technique for increasing vascularity.

16) Giant Sets Training Principle-A giant set is a series of 4-6 exercises for one muscle group, with little or no rest between them. Let's say you're going to train your chest. You might be doing flat benches, inclines, dips and pullovers. You do one set of flat benches with a 30-second rest, then a set of inclines with a 30-second rest, then a set of pullovers with a 30-second rest. This is one giant set. Doing the sets this way, and repeating this procedure 3-4, times you will be able to give full effort to each exercise working different parts of the muscle. This gives your chest a balanced development.

17) Pre-Exhaustion Training Principle-When you work a muscle group to the point of fatigue in its primary motion using an isolation movement, then immediately superset that exercise with a secondary motion using a basic movement, that's preexhaustion. For example, you can pre-exhause your quadriceps by doing a set of leg extensions and then immediately go into a set of squats, which works the quads even harder than usual by bringing in assisting muscles like the low-back extensors and hip flexors.

18) Rest-Pause Training Principle-How can you do a maximum weighted set for every repetition? Rest-pause is the answer. If you do as much weight as you can for 2-3 repetitions, rest 30-45 seconds and squeeze out another 2-3 reps, rest 40-60 seconds and get another two reps, and then rest 60-90 seconds and get 1-2 more reps, you will have done one long set of 7-10 reps that have all been near-maximum repetitions. Rest-pause is a strength-and size-producing technique.

19) Peak Contraction Training Principle--Peak contraction is a method by which you keep full tension on a working muscle when it is in the fully contracted position. For example, when you do a dumbbell curl you normally lose effective resistance at the top of the motion when you lock out with the weight. To avoid this loss and provide resistance in a position of full muscle contraction, you can lean forward, taking your arm out of the direct line of gravity so that you can never fully lock out. You keep constant tension on your muscles, which in turn helps to peak and striate your biceps.

20) Continuous Tension Training Principle-Momentum can be your muscles' worst enemy. If you train so fast that you swing your weights through most of their full range of motion, you decrease the work of the muscle. It's better to train slowly and deliberately, maintaining constant tension on your muscles at all times. This type of training is intense and stimulates the muscle fibers.

21) Reverse-Gravity Training Principle-Resisting the downward force of your training weights as you lower them is a very intense form of training that produces a great deal of muscle soreness and is an excellent way to stimulate maximum muscle growth. Reverse-Gravity (negative) training should only be done on an occasional basis. For instance in doing a barbell curl, let's say you can handle 100 pounds for eight reps. Have a partner help you bring a 120-pound barbell up to your shoulders, or if you're training alone swing it up to your shoulders and then lower it slowly in strict style to the starting position for a strong eight reps. This method of training strengthens your muscles and connective tissues and helps you to increase your strength faster. You can also apply this technique to weaker bodyparts in order to bring them into balance with the remainder of your physique, a process that is best accomplished during an off-season cycle.

22) Forced Reps Training Principle-I mentioned earlier that this is one of my most misunderstood training principles. It is a very intense training method, and many bodybuilders will overtrain if they attempt to use forced reps too much. Those stars who use forced reps (e.g., Bertil Fox, Tom Platz, Matt Mendenhall) are usually men of tremendous power and concentration, men who have been blessed with favorable genetics for bodybuilding. And even they use forced reps sparingly. As an example of forced reps, let's say that you can bench press 225 pounds for eight reps.

When you have reached this eighth rep, you have a training partner standing at the head of the bench help pull up on the middle of the bar just enough so you can squeeze out 2-3 additional forced reps past the point at which you would normally fail to complete a full rep under your own power. Forced reps push your muscle fibers beyond normal fatigue to stimulate even greater growth and muscular density.

23) Double-Split Training Principle-Many bodybuilders today work one or two bodyparts alone in the morning, and then return to the gym in the late afternoon or evening to train another bodypart or two. This is the famous Weider Double-Split System. The advantage is obvious. By training just one or two bodyparts per session you can devote all your energy to these bodyparts, doing more sets and handling greater weights, and thereby stimulating more muscle growth.

24) Triple-Split Training Principle-There are a few bodybuilders who have tremendous recovery rates and can benefit by the same reasoning as above by training *three* times a day; working a different bodypart each session. Albert Beckles, one of my greatest champions, is such a bodybuilder.

25) Burns Training Principle-When you do 2-3 short partial reps at the end of your regular set, you bring extra blood and lactic acid into the muscle you're training. This increased lactate causes the discomfort known as *burns*. Physiologically, the fatigue products and extra blood carried into the muscle by these partial movements swell the cells and cause the capillaries to proliterate. All of this contributes to increased size and vascularity in the muscles. Larry Scott, one of my pupils and our first Mr. Olympia, uses this technique on almost all his exercises.

26) Quality Training Principle-Quality training means that you gradually reduce your between-sets rest time while still trying to do the same or higher repetitions than before. Quality or precontest training is great for increasing your muscle definition and vascularity.

27) Descending Sets Training Principle-This method is also called "stripping" by many bodybuilders. My heavy-to-light system requires that you have two training partners who strip the weight off each side of your bar when you have completed all the reps you can do with that weight, making the barbell lighter and enabling you to grind out a couple more reps. Thus, you extend your set by stripping weights. This is a way to increase intensity on each set, but it's very hard work and you shouldn't practice this principle on more than 1-2 exerises per workout.

28) Instinctive Training Principle-There is one overriding rule in bodybuilding. Only you can know what works best for your body. Eventually, all bodybuilders must attain the ability to construct routines, groups of exercises, and sets and reps that work best for them. If they don't, they'll never reach their full potential. Each person responds differently to different diets and exercise schemes. With experience, you'll know instinctively how to exercise for the best gains. Remember: You are unique, and you must train to reflect that fact!

29) Eclectic Training Principle-Combining mass building and isolation-refinement movements into a specific training system is eclectic training. This technique means you choose a variety of

movements and general principles that work for you best in your system of training. When you combine this principle along with the Instinctive Principle, you are approaching the ultimate in training for strengthening, shaping and muscular growth.

30) Partial Reps Training Principle-As a means of increasing physical power and size, you can do partial reps at the beginning, midpoint and finish position of basic exercises. This method is best used with a power rack on which you can set pins at each height to support the barbell. You can use much heavier poundages when doing partial reps, which greatly strengthens the ligaments, tendons and other connective tissues, and which in turn builds great strength at a very fast pace. For another example, let's use the two-arm chin behind neck. You can chin all the way up with no weights attached to your body. However, If you add 50 pounds to your waist, you will be able to chin only half way up, which proves that doing the full rep with no weight does not develop the powerful muscles that come into action at the beginning of the chin to their fullest. The weak link in the chin, about half way up, restricts the total benefit of the exercise. That is why doing a partial rep with heavy weight is beneficial in developing ultimate mass and power in each muscle group. That is also why partial reps can be used by advanced bodybuilders to overcome weak

31) Speed Principle-With conventional bodybuilding training, sets and repetitions, as I have elucidated them for you, you should try to train in a controlled, strict manner so that you concentrate, feel and isolate your muscles to the best of your ability. This is the best way to develop a winning physique, one that is shapely, strong and proportionate, as well as massive.

However, many bodybuilders are concerned with gaining size. From my experience with thousands of bodybuilders, I have found that using heavy weights is the best way to develop size. My speed principle is perfect for this.

With the speed principle you handle heavier weights than you are used to. Because you had to do 8-12 reps before, you were forced to use lighter weights. Now I want you to use heavy enough weight that you can only get around 6-7 repetitions (still try to use perfect technique). Now, however, instead of deliberately moving slowly and concentrating on the "feel" of the muscle contraction, try to explode all the way through the motion with as heavy a weight as you can. Concentrate on getting the weight up fast! Do not use this principle, though, until you have had at least six months of consistent training experience behind you. This is crucial. You must develop a base before you can take advantage of this technique. You should also not use this technique on any of your lighter warm-up sets.

Concentrate just on speed on your heavier sets, all of those that are over 75-85% of your maximum single. Let's say you are bench pressing. If you could do 200 pounds one time, you would use about 160-170 pounds for your speed sets (after your warm-ups). When you do these sets, keep good technique, but just think speed and push the weight up as fast as possible. Never sacrifice form!

Why do you do this? I developed the speed principle because your muscular and nervous systems are composed of many different

fiber types and innervation. You have fast-acting and slow-acting muscles and different nerves serve the different types of fibers. If you want to develop all your muscles, to their maximum potential, not only should you do slow, concentrated movements, but explosive heavy movements too. You should not do speed training all the time. Instead, cycle the movements into your yearly training program. They are best used in the early portions of your off-season training when you are concentrating on strength and muscle size.

32) Staggered Sets Priniciple-The staggered sets principle is really an advanced form of priority training. With priority training, you work your big muscle groups or your slowest developing muscle groups first in your training routine. Usually, these are the same muscle groups which also require the greatest energy demands from your body. By doing them first you are able to focus on the most important muscles for the development of an outstanding physique. These muscle groups would include your legs, chest, back and shoulders.

Certain smaller bodyparts are sometimes very densely muscled and consequently, slower to develop. Nevertheless, they usually don't require a great deal of energy expenditure to train. With the staggered sets principle, you "stagger" smaller, slower-developing bodyparts in between sets for larger muscle groups. You can use this technique through your whole workout with whatever major bodypart you are working.

Here's the way it works: Muscle groups that are good candidates for staggering are forearms, neck, calves and trapezius. Let's say you want to concentrate on your forearms, but you are working your thighs as your major bodypart. Do a set of squats. Instead of resting totally before your next set of squats, take a bar and do a set of wrist curls for your forearms. Do another set of squats, followed by another set of wrist curls. You might do four sets of squats and four sets of wrist curls in this manner. Because your forearms are so far removed from your thighs, staggering your sets like this will not take anything away from your thigh workout.

Go ahead and move to your next thigh exercise, say, leg extensions, and following each set of those do a set of a different forearm exercise, like reverse curls. Continue in this manner until you have totally flushed and gorged your forearms. By the end of your session, not only will you have blasted your thighs, but will also have worked your forearms and you won't have to work them separately some other day. You've therefore accomplished an economic form of hitting your slow-todevelop areas (by the way, you could just as easily do shrugs with thighs or abdominals with shoulders or neck with arms. The point is, you can work any small, slow-to-develop bodypart with a farremoved, major bodypart without taking anything away from your major area. I also want to point out, you should not always use this staggered sets principle, only when you really want to bring up a weaker, smaller part.

Be patient and study these principles. By the time you have completed the wall chart workouts, you will be ready to make full use of these principles by incorporating them in your own training routines.

CHAPTER 29 YOU CAN DO IT!

In this course, I have given you the knowledge you'll need to build a strong, muscular, physically fit body. Still, I know that the individual needs more than instruction to reach the top.

Look at any successful man or woman in any profession, and you will probably find an aggressive, determined, progressive individual who is totally committed to his or her goal. You will see a man or woman who leaves nothing to chance, who's quick to take advantage of new and improved ideas and techniques, who constantly stays abreast of new developments.

Champion bodybuilders should be no different. For success you need knowledge, modern bodybuilding equipment, confidence and an alert, progressive mind. You must always keep up with the latest advances in modern bodybuilding science.

My bodybuilding course is the most modern and complete ever developed. However, you must never overlook the fact that in your advanced training, certain new scientific bodybuilding discoveries can be of vital importance to you. Therefore, I urge you to read MUSCLE & FITNESS, FLEX, SHAPE, and MEN'S FITNESS monthly. All four are available on newsstands, or they can be ordered. For subscription information, write to me at 21100 Erwin Street, Woodland Hills, CA 91367 Or you can fill out one of the postpaid subscription cards in the magazines.

In these magazines you will find reports on all new training principles as soon as I have approved them for use by the Weider Research Group and my students. The magazines, which are filled with interviews with the superstars, contest reports and inspirational stories, will aid you in your quest for physical perfection. That's why the champions call MUSCLE & FITNESS the bible of bodybuilding. They constantly refer to it for advice and inspiration.

You should also purchase and carefully study each of the Specialization Bulletins issued by the Weider Research Group. These bulletins give you detailed, up-to-date information on such topics as building mass and power, preparing for competitions and training every bodypart.

I also urge you to read books on nutrition, biochemistry, selfmotivation, exercise physiology, anatomy, kinesiology, psychology and other works related to athletic training. Most bodybuilders who have been winning IFBB pro titles over the past few years have made a habit of reading these types of books. Remember, to reach the top as a bodybuilder, you must be well informed.

I have also written and edited a large number of books-15 to date-on elite-level bodybuilding. They are available in all bookstores and through MUSCLE & FITNESS.

You can't build a powerful physique without the proper training equipment. You must have ample weights-up to 1,000 pounds of platesand you should have exercise benches, an abdominal board, squat rack, pulley apparatus and other equipment to build



a complete body. My staff is always ready to fill your orders for equipment.

In your bodybuilding, take a long-range view. Don't just think of today. Remember, each day that you take a workout, each day that you live a healthful and balanced lifestyle, you are building up an account of strength, endurance and muscular development for your future. Even if you don't see new muscle forming week after week as a result of your training, you can be sure that you're better off physically and mentally because you are taking a wholesome interest in your well-being.

If for some reason you are forced to suspend your workouts indefinitely, be thankful that you were able to put in as much time with your training as you did, for you will also be a fitter person for the rest of your life. And even when you can't train. continue to keep your enthusiasm and knowledge high

reading MUSCLE & FITNESS, FLEX, SHAPE and MENS FITNESS every month, and plan to resume your training again as soon as conditions permit. Hold onto your bodybuilding equipment. Keep it in a handy place, where it will constantly serve as a reminder of the benefits from hard training.

The road to success is not always trouble free. Some champions have reached the top with only 4-5 years of training. Others have taken longer, but none of them would ever have become famous

without continued training. Whether you are a fast gainer or a slow gainer makes little difference. When you are crowned a champion, or have reached the development you have always wanted, the thrill you get will repay you many times over for whatever efforts you've expended.

Remember, my staff and I will always remain interested in your success just as long as you maintain your desire to train hard. Write to us any time for help if you can't find the answer to your questions in my four magazines.

We will never let you down. My fervent wish is for you to join the millions of successful Joe Weider students and achieve the body you always wanted. I know you can make it, so resolve that you will, and then let nothing change that resolve. My very best wishes go out to you in your quest for physical perfection.

Your instructor and friend,

Joe Weider – The Muscle Builder Trainer of Champions since 1936

LISTING OF NEW SPECIALIZATION COURSES TO BE RELEASED SHORTLY.

BUILD POWERFUL ARMS
SHOULDERS AND NECK OF A SAMSON
HOW TO BUILD A BIG, THICK CHEST
AN ATLAS BACK: LIFT THE WORLD!
MUSCULARIZE YOUR ABS
THICK, STRONG LEGS AND CALVES
MASS/MUSCLE MIGHT AND MUSCULARITY
LOSE FAT AND MOLD MUSCLE: HOW TO DO IT FAST!
MUSCLES IN MOTION: HOW THEY WORK
THE CHAMPION'S TRAINING TABLE

POSING BEAUTY AND COMPETITION PREPARATION REST/RECUPERATION/OVERTRAINING & PROGRESS MACHINES OR WEIGHTS? CHICKEN OR EGG? THE SECRETS OF IMMENSE STRENGTH THRU POWERLIFTING LIFT LIKE A GOD: WEIGHTLIFTING SPORTS MEDICINE: TAKE CARE OF YOUR BODY WEIGHTS AND WEIDER FOR WOMEN THE SECRET OF SIZE AND HARDNESS OF MUSCLE THE BOOK OF THE YEAR

"You youngsters (10-16 years of age) can train with my system too, but you should avoid heavy powerlifting and overhead weightlifting because the growth plates in your bones and spine are not mature and you could injure yourself. Instead, do higher repetitions."